(9604.5)

Discharge at Tumlingtar (1978)

1979

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	158.00	139.00	158.00	158.00	275.00	524.00	844.00	1347.00	683.00	661.00	293.00	207.00
2	162.00	143.00	160.00	151.00	293.00	418.00	762.00	1469.00	687.00	600.00	295.00	215.00
3	160.00	139.00	158.00	153.00	305.00	381.00	829.00	1262.00	613.00	532.00	288.00	202.00
4	156.00	139.00	162.00	170.00	314.00	359.00	762.00	1390.00	644.00	510.00	280.00	193.00
5	152.00	135.00	162.00	187.00	257.00	406.00	776.00	1225.00	696.00	577.00	278.00	193.00
6	147.00	137.00	154.00	177.00	273.00	453.00	732.00	1239.00	634.00	769.00	271.00	196.00
7	147.00	139.00	162.00	168.00	280.00	453.00	736.00	1157.00	634.00	567.00	268.00	189.00
8	150.00	143.00	160.00	175.00	267.00	887.00	806.00	1494.00	634.00	541.00	258.00	189.00
9	150.00	139.00	152.00	187.00	240.00	705.00	675.00	1347.00	705.00	507.00	264.00	185.00
10	150.00	135.00	162.00	220.00	349.00	1366.00	627.00	1304.00	740.00	492.00	254.00	183.00
11	147.00	133.00	166.00	206.00	275.00	1267.00	693.00	1357.00	829.00	461.00	252.00	179.00
12	145.00	135.00	211.00	208.00	288.00	1352.00	754.00	1299.00	931.00	455.00	249.00	177.00
13	145.00	143.00	168.00	218.00	338.00	750.00	718.00	1202.00	1091.00	444.00	245.00	177.00
14	152.00	141.00	154.00	206.00	333.00	679.00	806.00	1069.00	1366.00	435.00	251.00	172.00
15	145.00	147.00	152.00	226.00	368.00	693.00	964.00	997.00	1117.00	409.00	242.00	170.00
16	145.00	154.00	158.00	250.00	464.00	837.00	868.00	1108.00	931.00	398.00	240.00	166.00
17	147.00	183.00	162.00	242.00	453.00	634.00	1100.00	884.00	784.00	401.00	235.00	166.00
18	147.00	166.00	191.00	298.00	464.00	675.00	1140.00	822.00	837.00	376.00	242.00	160.00
19	147.00	158.00	189.00	226.00	472.00	1056.00	1100.00	799.00	1117.00	370.00	271.00	158.00
20	148.00	137.00	179.00	240.00	441.00	795.00	981.00	791.00	776.00	365.00	283.00	162.00
21	150.00	139.00	170.00	222.00	423.00	686.00	1065.00	747.00	700.00	358.00	240.00	162.00
22	158.00	139.00	162.00	205.00	473.00	860.00	837.00	784.00	682.00	354.00	231.00	162.00
23	159.00	139.00	158.00	218.00	385.00	1056.00	1140.00	784.00	630.00	338.00	235.00	158.00
24	145.00	149.00	160.00	271.00	358.00	967.00	1299.00	848.00	617.00	333.00	231.00	154.00
25	145.00	149.00	156.00	240.00	368.00	856.00	936.00	940.00	687.00	325.00	215.00	150.00
26	145.00	153.00	152.00	295.00	453.00	848.00	884.00	891.00	703.00	318.00	211.00	150.00
27	147.00	156.00	162.00	218.00	741.00	864.00	1121.00	799.00	644.00	313.00	211.00	145.00
28	145.00	158.00	158.00	226.00	563.00	814.00	1566.00	814.00	587.00	307.00	193.00	145.00
29	143.00		160.00	261.00	455.00	776.00	1082.00	772.00	558.00	298.00	191.00	147.00
30	141.00		164.00	209.00	404.00	776.00	976.00	714.00	583.00	303.00	202.00	143.00
31	141.00		162.00		453.00		1148.00	743.00		298.00		143.00
TOTAL	4618.00	4067.00	5084.00	6431.00	11825.00	23194.00	28727.00	32398.00	22840.00	13415.00	7429.00	5293.00
AVERAGE	148.97	145.25	164.00	214.37	381.45	773.13	926.68	1045.10	761.33	432.74	247.63	170.74
MAXIMUM	162.00	183.00	211.00	298.00	741.00	1366.00	1566.00	1494.00	1366.00	769.00	295.00	215.00
MINIMUM	141.00	133.00	152.00	151.00	240.00	358.00	627.00	714.00	558.00	298.00	191.00	143.00

MAX- DATE < 780728 > 1566.00
25- DATE < 780815 > 997.00
95- DATE < 780615 > 693.00
185- DATE < 781104 > 280.00
275- DATE < 780322 > 162.00
355- DATE < 780207 > 139.00
MIN- DATE < 780211 > 133.00

*ITEM(2)

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
165321.00	452.93	1566.00	133.00

(0404.5)

Discharge at Tumlingtar (1979)

1979

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	139.00	113.00	120.00	147.00	213.00	229.00	1489.00	1352.00	739.00	421.00	293.00	259.00
2	139.00	113.00	120.00	166.00	204.00	247.00	1323.00	1100.00	841.00	404.00	293.00	482.00
3	135.00	113.00	127.00	183.00	259.00	261.00	1091.00	1139.00	1211.00	513.00	285.00	211.00
4	139.00	113.00	127.00	191.00	266.00	266.00	1018.00	887.00	1179.00	679.00	280.00	206.00
5	133.00	109.00	139.00	204.00	254.00	263.00	725.00	852.00	1170.00	721.00	271.00	198.00
6	131.00	113.00	143.00	154.00	222.00	259.00	765.00	799.00	1193.00	895.00	266.00	193.00
7	127.00	120.00	143.00	162.00	206.00	249.00	634.00	761.00	1044.00	651.00	261.00	189.00
8	127.00	139.00	135.00	166.00	196.00	293.00	651.00	806.00	989.00	613.00	259.00	187.00
9	127.00	122.00	127.00	179.00	226.00	293.00	620.00	739.00	899.00	700.00	254.00	179.00
10	129.00	116.00	109.00	183.00	240.00	252.00	689.00	852.00	884.00	747.00	249.00	187.00
11	129.00	118.00	106.00	196.00	240.00	256.00	765.00	911.00	960.00	884.00	249.00	172.00
12	129.00	116.00	113.00	196.00	288.00	293.00	907.00	1234.00	1061.00	714.00	240.00	170.00
13	129.00	124.00	116.00	177.00	365.00	271.00	1006.00	1122.00	899.00	583.00	236.00	179.00
14	131.00	124.00	135.00	173.00	295.00	315.00	972.00	1048.00	1202.00	516.00	231.00	170.00
15	135.00	124.00	120.00	185.00	305.00	412.00	952.00	968.00	700.00	495.00	231.00	162.00
16	135.00	127.00	127.00	196.00	325.00	485.00	818.00	915.00	630.00	461.00	179.00	164.00
17	131.00	126.00	118.00	196.00	423.00	376.00	750.00	899.00	617.00	450.00	226.00	164.00
18	133.00	127.00	143.00	158.00	373.00	349.00	802.00	844.00	580.00	401.00	226.00	164.00
19	124.00	127.00	152.00	147.00	415.00	429.00	754.00	743.00	551.00	415.00	224.00	164.00
20	129.00	154.00	137.00	158.00	318.00	398.00	821.00	1090.00	485.00	395.00	224.00	164.00
21	120.00	147.00	127.00	187.00	325.00	696.00	1108.00	1618.00	485.00	368.00	224.00	164.00
22	120.00	111.00	147.00	213.00	308.00	476.00	936.00	1207.00	587.00	370.00	222.00	162.00
23	116.00	122.00	131.00	179.00	271.00	476.00	1940.00	1048.00	479.00	354.00	222.00	156.00
24	116.00	115.00	139.00	166.00	273.00	476.00	1520.00	903.00	479.00	352.00	220.00	158.00
25	118.00	106.00	135.00	183.00	245.00	510.00	1189.00	825.00	450.00	341.00	217.00	162.00
26	124.00	106.00	139.00	191.00	231.00	516.00	1130.00	856.00	441.00	333.00	215.00	168.00
27	122.00	113.00	143.00	217.00	249.00	710.00	1144.00	806.00	450.00	331.00	213.00	168.00
28	124.00	115.00	131.00	200.00	215.00	696.00	1357.00	776.00	458.00	318.00	222.00	164.00
29	124.00		137.00	222.00	238.00	743.00	1239.00	868.00	412.00	305.00	209.00	158.00
30	115.00		127.00	215.00	231.00	919.00	1052.00	868.00	390.00	308.00	236.00	164.00
31	115.00		141.00		231.00		1211.00	799.00		300.00		168.00
TOTAL	3943.00	3373.00	4054.00	5490.00	8450.00	12404.00	31378.00	29635.00	22465.00	15338.00	7177.00	5756.00
AVERAGE	127.19	120.46	130.77	183.00	272.58	413.47	1012.19	955.97	748.83	494.77	239.23	185.68
MAXIMUM	139.00	154.00	152.00	222.00	423.00	919.00	1940.00	1618.00	1211.00	895.00	293.00	482.00
MINIMUM	115.00	106.00	106.00	147.00	196.00	229.00	620.00	739.00	390.00	300.00	179.00	156.00

MAX- DATE < 790723 > 1940.00
35- DATE < 790815 > 968.00
95- DATE < 791013 > 587.00
185- DATE < 790511 > 240.00
275- DATE < 790319 > 152.00
355- DATE < 790203 > 113.00
MIN- DATE < 790311 > 106.00

*IT'M(2)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
149463.00	409.49	1940.00	106.00

(CMS4.5) Discharge at Tumlingtar (1980) 1980

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	162.00	135.00	204.00	183.00	215.00	259.00	952.00	1243.00	1875.00	814.00	318.00	186.00
2	158.00	156.00	183.00	193.00	235.00	297.00	844.00	1126.00	1126.00	957.00	318.00	190.00
3	152.00	137.00	154.00	179.00	245.00	305.00	856.00	1166.00	1655.00	746.00	298.00	186.00
4	150.00	137.00	160.00	183.00	245.00	379.00	806.00	1170.00	1464.00	724.00	310.00	204.00
5	148.00	135.00	159.00	175.00	365.00	441.00	841.00	1108.00	1700.00	643.00	306.00	197.00
6	148.00	135.00	377.00	179.00	318.00	406.00	968.00	1117.00	1370.00	648.00	274.00	193.00
7	145.00	133.00	179.00	200.00	290.00	725.00	880.00	1166.00	1247.00	612.00	270.00	190.00
8	141.00	127.00	170.00	211.00	302.00	450.00	860.00	1144.00	1173.00	576.00	259.00	186.00
9	143.00	126.00	170.00	215.00	300.00	567.00	1095.00	1225.00	1191.00	586.00	266.00	183.00
10	141.00	129.00	145.00	215.00	240.00	597.00	852.00	1135.00	1641.00	597.00	270.00	176.00
11	143.00	133.00	143.00	202.00	254.00	432.00	780.00	1175.00	1216.00	571.00	255.00	159.00
12	141.00	129.00	143.00	198.00	254.00	426.00	696.00	1117.00	1272.00	537.00	251.00	159.00
13	139.00	133.00	137.00	217.00	242.00	444.00	761.00	1220.00	1450.00	547.00	255.00	159.00
14	137.00	164.00	147.00	231.00	229.00	607.00	940.00	1285.00	1844.00	517.00	251.00	152.00
15	137.00	137.00	147.00	222.00	224.00	725.00	1031.00	2067.00	2018.00	489.00	244.00	159.00
16	137.00	156.00	158.00	215.00	249.00	1022.00	993.00	1648.00	1492.00	461.00	240.00	152.00
17	137.00	143.00	158.00	209.00	254.00	728.00	1323.00	2067.00	1330.00	456.00	236.00	146.00
18	137.00	147.00	156.00	196.00	235.00	613.00	1262.00	2278.00	1191.00	438.00	236.00	143.00
19	135.00	133.00	170.00	217.00	235.00	780.00	1500.00	1562.00	1197.00	438.00	233.00	143.00
20	135.00	133.00	177.00	242.00	240.00	682.00	1104.00	1655.00	1026.00	447.00	236.00	139.00
21	137.00	156.00	170.00	245.00	273.00	682.00	1117.00	1767.00	995.00	480.00	222.00	143.00
22	137.00	156.00	233.00	268.00	373.00	658.00	993.00	1767.00	939.00	442.00	222.00	139.00
23	137.00	145.00	196.00	293.00	362.00	739.00	1234.00	1583.00	896.00	420.00	225.00	136.00
24	133.00	168.00	193.00	261.00	328.00	710.00	989.00	1569.00	820.00	438.00	214.00	143.00
25	135.00	175.00	198.00	245.00	328.00	806.00	844.00	1533.00	774.00	393.00	207.00	143.00
26	135.00	152.00	193.00	242.00	320.00	710.00	833.00	1714.00	861.00	384.00	200.00	143.00
27	135.00	152.00	185.00	222.00	275.00	844.00	872.00	1555.00	831.00	363.00	200.00	136.00
28	137.00	152.00	173.00	226.00	271.00	754.00	936.00	1922.00	814.00	372.00	200.00	136.00
29	137.00	160.00	185.00	254.00	266.00	718.00	936.00	1633.00	843.00	372.00	193.00	136.00
30	133.00		183.00	238.00	263.00	710.00	1122.00	1597.00	890.00	330.00	197.00	136.00
31	133.00		177.00		275.00		1410.00	1612.00		322.00		127.00
TOTAL	4353.00	4174.00	5322.00	6566.00	8505.00	18205.00	30630.00	45926.00	37141.00	16120.00	7406.00	4920.00
AVERAGE	140.42	143.93	171.68	218.87	274.35	606.87	988.06	1481.48	1238.03	520.00	246.87	158.71
MAXIMUM	162.00	175.00	233.00	293.00	373.00	1022.00	1500.00	2278.00	2018.00	957.00	318.00	204.00
MINIMUM	133.00	126.00	137.00	175.00	215.00	259.00	696.00	1108.00	774.00	322.00	193.00	127.00

MAX-	DATE < 800818 >	2278.00
35-	DATE < 800907 >	1247.00
95-	DATE < 800711 >	780.00
185-	DATE < 800429 >	254.00
275-	DATE < 800224 >	168.00
355-	DATE < 800130 >	133.00
MIN-	DATE < 800202 >	126.00

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
199269.00	517.13	2278.00	126.00

(0604.5)

Discharge at Tumlingtar (1981)

1981

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	130.00	123.00	134.00	179.00	218.00	376.00	1444.00	1072.00	1089.00	450.00	210.00	143.00
2	166.00	126.00	159.00	152.00	263.00	461.00	1464.00	1498.00	808.00	454.00	208.00	149.00
3	120.00	120.00	157.00	162.00	251.00	592.00	1430.00	1260.00	1089.00	450.00	208.00	146.00
4	133.00	117.00	139.00	225.00	290.00	542.00	1376.00	1197.00	863.00	409.00	206.00	144.00
5	127.00	117.00	127.00	218.00	274.00	576.00	1311.00	1324.00	884.00	422.00	294.00	149.00
6	139.00	114.00	149.00	197.00	355.00	452.00	1072.00	1185.00	926.00	386.00	217.00	144.00
7	123.00	136.00	146.00	186.00	359.00	389.00	927.00	1118.00	863.00	358.00	204.00	143.00
8	120.00	130.00	149.00	157.00	310.00	363.00	797.00	1054.00	1209.00	342.00	190.00	139.00
9	117.00	120.00	139.00	156.00	314.00	385.00	896.00	1043.00	1228.00	337.00	188.00	136.00
10	123.00	111.00	130.00	162.00	359.00	398.00	843.00	921.00	1048.00	325.00	188.00	135.00
11	117.00	111.00	123.00	214.00	380.00	393.00	814.00	1700.00	1026.00	300.00	183.00	136.00
12	114.00	111.00	117.00	183.00	338.00	447.00	1066.00	1922.00	910.00	300.00	177.00	135.00
13	133.00	117.00	120.00	186.00	259.00	675.00	746.00	1396.00	1148.00	284.00	179.00	136.00
14	111.00	114.00	123.00	186.00	278.00	797.00	982.00	1437.00	1197.00	286.00	179.00	135.00
15	114.00	136.00	143.00	338.00	334.00	780.00	1072.00	1317.00	948.00	276.00	175.00	132.00
16	114.00	126.00	169.00	222.00	263.00	915.00	1089.00	1285.00	932.00	263.00	172.00	129.00
17	120.00	133.00	172.00	290.00	393.00	724.00	1148.00	1026.00	798.00	266.00	162.00	129.00
18	114.00	149.00	149.00	298.00	359.00	729.00	1191.00	1142.00	759.00	253.00	165.00	126.00
19	114.00	142.00	123.00	274.00	368.00	607.00	1142.00	1203.00	671.00	251.00	167.00	122.00
20	111.00	183.00	197.00	282.00	368.00	664.00	1077.00	1142.00	657.00	246.00	157.00	124.00
21	117.00	159.00	211.00	218.00	351.00	718.00	1107.00	1291.00	622.00	246.00	157.00	127.00
22	117.00	159.00	240.00	240.00	389.00	653.00	1363.00	1505.00	627.00	249.00	150.00	122.00
23	114.00	159.00	193.00	222.00	355.00	680.00	1177.00	1343.00	509.00	246.00	154.00	123.00
24	114.00	136.00	176.00	274.00	326.00	970.00	1396.00	1203.00	513.00	249.00	152.00	124.00
25	120.00	169.00	146.00	233.00	326.00	826.00	1173.00	1185.00	468.00	237.00	152.00	124.00
26	114.00	152.00	152.00	218.00	338.00	872.00	1430.00	1142.00	447.00	237.00	149.00	123.00
27	105.00	146.00	139.00	207.00	342.00	1291.00	1203.00	964.00	440.00	249.00	150.00	121.00
28	117.00	159.00	136.00	218.00	447.00	1222.00	1457.00	1042.00	536.00	226.00	147.00	121.00
29	120.00		143.00	207.00	371.00	1107.00	1197.00	1119.00	560.00	221.00	146.00	121.00
30	114.00		139.00	193.00	322.00	1066.00	1317.00	1197.00	544.00	219.00	144.00	121.00
31	149.00		152.00		330.00		1492.00	1101.00		219.00		120.00
TOTAL	3761.00	3775.00	4679.00	6492.00	10230.00	20670.00	36199.00	38334.00	24319.00	9256.00	5340.00	4079.00
AVERAGE	121.32	134.82	150.94	216.40	330.00	689.00	1167.71	1236.58	810.63	298.58	178.00	131.58
MAXIMUM	166.00	183.00	240.00	338.00	447.00	1291.00	1492.00	1922.00	1228.00	454.00	294.00	149.00
MINIMUM	105.00	111.00	117.00	152.00	218.00	363.00	746.00	921.00	440.00	219.00	144.00	120.00

MAX- DATE < 810812 > 1922.00
35- DATE < 810718 > 1191.00
05- DATE < 810613 > 675.00
185- DATE < 810322 > 240.00
275- DATE < 811204 > 144.00
355- DATE < 810124 > 114.00
MIN- DATE < 810127 > 105.00
*ITEMS(2)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
167134.00	457.90	1922.00	105.00

Discharge at Tumlingtar (1982)

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	117.00	114.00	135.00	191.00	191.00	373.00	631.00	693.00	631.00	311.00	162.00	131.00
2	116.00	116.00	144.00	177.00	204.00	342.00	580.00	662.00	572.00	284.00	154.00	123.00
3	120.00	111.00	149.00	200.00	230.00	361.00	662.00	653.00	540.00	299.00	160.00	126.00
4	122.00	113.00	146.00	192.00	226.00	389.00	759.00	662.00	580.00	271.00	157.00	123.00
5	119.00	112.00	136.00	131.00	226.00	183.00	735.00	640.00	532.00	251.00	157.00	123.00
6	115.00	119.00	137.00	226.00	208.00	392.00	768.00	589.00	631.00	249.00	163.00	121.00
7	122.00	114.00	126.00	200.00	228.00	345.00	740.00	572.00	593.00	239.00	157.00	117.00
8	120.00	123.00	124.00	204.00	228.00	402.00	721.00	768.00	548.00	239.00	150.00	117.00
9	117.00	121.00	123.00	170.00	230.00	798.00	1222.00	721.00	472.00	239.00	150.00	122.00
10	120.00	108.00	124.00	188.00	230.00	556.00	1173.00	631.00	468.00	237.00	167.00	119.00
11	117.00	110.00	121.00	167.00	284.00	373.00	1048.00	605.00	498.00	226.00	163.00	119.00
12	119.00	112.00	122.00	174.00	273.00	648.00	992.00	622.00	580.00	228.00	154.00	116.00
13	117.00	119.00	128.00	174.00	300.00	447.00	793.00	666.00	684.00	213.00	157.00	115.00
14	117.00	116.00	128.00	160.00	294.00	524.00	1142.00	666.00	560.00	208.00	150.00	123.00
15	119.00	115.00	129.00	160.00	188.00	509.00	1077.00	675.00	666.00	196.00	147.00	121.00
16	117.00	126.00	135.00	167.00	235.00	494.00	693.00	618.00	560.00	181.00	144.00	120.00
17	119.00	126.00	230.00	172.00	266.00	505.00	858.00	693.00	486.00	183.00	147.00	121.00
18	116.00	128.00	196.00	230.00	251.00	707.00	1089.00	644.00	490.00	185.00	144.00	116.00
19	116.00	123.00	162.00	181.00	206.00	900.00	1970.00	584.00	568.00	188.00	140.00	115.00
20	114.00	120.00	157.00	208.00	206.00	1142.00	1197.00	778.00	644.00	183.00	142.00	116.00
21	117.00	119.00	154.00	228.00	194.00	948.00	959.00	716.00	532.00	179.00	139.00	114.00
22	116.00	119.00	150.00	172.00	170.00	910.00	932.00	778.00	501.00	185.00	150.00	112.00
23	114.00	121.00	160.00	177.00	177.00	828.00	1228.00	730.00	475.00	244.00	160.00	110.00
24	119.00	116.00	167.00	244.00	170.00	768.00	1185.00	1471.00	440.00	213.00	144.00	114.00
25	112.00	116.00	174.00	244.00	186.00	848.00	1077.00	778.00	464.00	192.00	143.00	112.00
26	111.00	119.00	154.00	210.00	215.00	853.00	1222.00	1020.00	422.00	188.00	135.00	112.00
27	113.00	123.00	140.00	185.00	253.00	803.00	1247.00	1350.00	392.00	185.00	131.00	110.00
28	111.00	126.00	139.00	204.00	284.00	675.00	1066.00	1203.00	345.00	177.00	133.00	109.00
29	108.00		147.00	185.00	278.00	675.00	1124.00	863.00	345.00	174.00	123.00	111.00
30	108.00		146.00	185.00	334.00	622.00	754.00	768.00	334.00	167.00	131.00	107.00
31	110.00		177.00		305.00		759.00	808.00		165.00		108.00
TOTAL	3598.00	3305.00	4560.00	5696.00	7260.00	18320.00	30403.00	23627.00	15553.00	6669.00	4454.00	3623.00
AVERAGE	116.06	118.04	147.10	189.87	234.19	610.67	980.74	762.16	518.43	215.13	148.47	116.87
MAXIMUM	122.00	128.00	230.00	244.00	334.00	1142.00	1970.00	1471.00	684.00	311.00	167.00	131.00
MINIMUM	108.00	108.00	121.00	131.00	170.00	183.00	580.00	572.00	334.00	165.00	123.00	107.00

MAX-	DATE < 820719 >	1970.00
35-	DATE < 820713 >	793.00
95-	DATE < 820614 >	524.00
185-	DATE < 820429 >	185.00
275-	DATE < 821203 >	126.00
355-	DATE < 821229 >	111.00
MIN-	DATE < 821230 >	107.00

*ITEM(2)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
127068.00	349.13	1970.00	107.00

(0604.5)

Discharge at Tumlingtar (1983)

1983

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	106.00	99.00	104.00	121.00	165.00	268.00	716.00	793.00	635.00	584.00	241.00	157.00
2	108.00	100.00	103.00	139.00	155.00	358.00	1009.00	716.00	863.00	657.00	230.00	155.00
3	105.00	99.00	103.00	131.00	155.00	412.00	2095.00	671.00	721.00	605.00	228.00	149.00
4	104.00	98.00	123.00	124.00	188.00	468.00	895.00	631.00	818.00	605.00	223.00	152.00
5	103.00	97.00	107.00	132.00	241.00	440.00	874.00	671.00	778.00	937.00	221.00	150.00
6	103.00	98.00	109.00	121.00	436.00	361.00	858.00	640.00	716.00	468.00	215.00	152.00
7	108.00	97.00	111.00	122.00	210.00	440.00	896.00	698.00	768.00	436.00	200.00	152.00
8	104.00	97.00	121.00	121.00	181.00	348.00	926.00	640.00	812.00	429.00	188.00	152.00
9	103.00	97.00	127.00	122.00	190.00	337.00	808.00	671.00	1042.00	426.00	185.00	152.00
10	103.00	97.00	126.00	120.00	170.00	270.00	580.00	721.00	1113.00	475.00	181.00	150.00
11	102.00	97.00	122.00	124.00	190.00	239.00	874.00	842.00	1191.00	863.00	196.00	150.00
12	101.00	97.00	120.00	127.00	221.00	228.00	838.00	853.00	1113.00	597.00	189.00	149.00
13	102.00	97.00	124.00	114.00	200.00	258.00	842.00	759.00	1526.00	618.00	196.00	146.00
14	103.00	98.00	121.00	117.00	223.00	192.00	2278.00	842.00	1505.00	440.00	192.00	146.00
15	102.00	101.00	121.00	117.00	202.00	239.00	1101.00	905.00	1077.00	433.00	183.00	143.00
16	101.00	101.00	118.00	120.00	190.00	286.00	920.00	910.00	1291.00	461.00	183.00	143.00
17	102.00	102.00	129.00	117.00	190.00	568.00	964.00	975.00	1095.00	405.00	179.00	140.00
18	100.00	99.00	129.00	131.00	263.00	361.00	916.00	744.00	1048.00	354.00	179.00	143.00
19	101.00	104.00	127.00	117.00	345.00	370.00	970.00	788.00	1060.00	337.00	181.00	136.00
20	103.00	105.00	126.00	115.00	278.00	464.00	948.00	889.00	884.00	291.00	181.00	137.00
21	102.00	104.00	131.00	115.00	316.00	803.00	998.00	953.00	1124.00	291.00	179.00	129.00
22	103.00	103.00	126.00	111.00	311.00	610.00	773.00	1037.00	900.00	311.00	177.00	133.00
23	103.00	103.00	116.00	113.00	278.00	1136.00	1136.00	910.00	1014.00	319.00	175.00	132.00
24	100.00	104.00	120.00	114.00	305.00	788.00	833.00	798.00	1400.00	302.00	170.00	129.00
25	103.00	103.00	117.00	122.00	284.00	436.00	1113.00	895.00	2026.00	300.00	172.00	133.00
26	100.00	108.00	118.00	133.00	221.00	627.00	964.00	813.00	1113.00	278.00	165.00	132.00
27	104.00	105.00	121.00	175.00	217.00	749.00	1065.00	708.00	926.00	273.00	165.00	131.00
28	103.00	104.00	121.00	200.00	221.00	754.00	910.00	759.00	798.00	266.00	165.00	128.00
29	101.00		122.00	181.00	258.00	325.00	1048.00	943.00	744.00	261.00	162.00	128.00
30	102.00		122.00	168.00	237.00	597.00	853.00	730.00	671.00	261.00	160.00	127.00
31	102.00		120.00		232.00		730.00	726.00		253.00		123.00
TOTAL	3187.00	2814.00	3705.00	3884.00	7273.00	13732.00	30731.00	24631.00	30772.00	13536.00	5661.00	4379.00
AVERAGE	102.81	100.50	119.52	129.47	234.61	457.73	991.32	794.55	1025.73	436.65	188.70	141.26
MAXIMUM	108.00	108.00	131.00	200.00	436.00	1136.00	2278.00	1037.00	2026.00	937.00	241.00	157.00
MINIMUM	100.00	97.00	103.00	111.00	155.00	192.00	580.00	631.00	635.00	253.00	160.00	123.00

MAX- DATE (830714) 2278.00
95- DATE (831005) 937.00
90- DATE (831002) 657.00
10- DATE (831114) 192.00
75- DATE (830314) 121.00
50- DATE (830204) 98.00
MIN- DATE (830213) 97.00

*ITEM(2)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
144305.00	395.36	2278.00	97.00

Discharge at Tumlingtar (1984)

DAYS	1	2	3	4	5	6	7	8	9	10	11	12
1	122.00	117.00	127.00	150.00	328.00	316.00	874.00	1216.00	1124.45	412.16	214.67	144.49
2	122.00	121.00	136.00	157.00	163.00	325.00	698.00	1368.00	964.35	385.87	208.35	145.96
3	120.00	120.00	133.00	147.00	146.00	319.00	684.00	1222.00	879.85	369.98	208.35	143.03
4	122.00	117.00	131.00	133.00	160.00	339.00	730.00	970.00	1154.45	354.53	206.28	145.96
5	123.00	119.00	129.00	128.00	170.00	392.00	754.00	721.00	1094.89	342.47	200.17	143.03
6	122.00	118.00	131.00	127.00	167.00	396.00	868.00	671.00	1197.15	351.49	196.19	141.58
7	120.00	114.00	133.00	121.00	177.00	396.00	926.00	631.00	1197.15	324.89	192.25	138.75
8	123.00	116.00	131.00	118.00	758.00	580.00	1154.00	610.00	1037.03	316.33	189.40	135.98
9	121.00	117.00	131.00	116.00	389.00	409.00	1210.00	580.00	884.06	319.16	192.25	135.98
10	122.00	116.00	135.00	121.00	190.00	874.00	1083.00	552.00	942.57	395.60	186.50	137.36
11	118.00	115.00	139.00	123.00	174.00	868.00	964.00	601.00	782.06	478.98	179.06	137.36
12	120.00	120.00	142.00	122.00	172.00	749.00	910.00	597.00	858.15	555.94	175.45	134.63
13	121.00	118.00	139.00	121.00	196.00	798.00	1154.00	653.00	863.30	408.82	171.90	137.36
14	121.00	120.00	132.00	126.00	241.00	644.00	1285.00	601.00	832.66	376.29	177.25	135.98
15	118.00	118.00	129.00	126.00	316.00	589.00	1043.00	605.00	926.41	666.15	177.25	134.63
16	126.00	120.00	139.00	133.00	389.00	509.00	1043.00	702.00	969.84	405.49	173.66	130.66
17	120.00	121.00	142.00	143.00	305.00	429.00	1215.00	675.10	1215.71	366.86	171.90	129.37
18	122.00	116.00	143.00	146.00	289.00	494.00	1066.00	675.10	1112.58	366.86	175.45	133.29
19	123.00	116.00	143.00	137.00	294.00	614.00	981.00	927.62	1265.94	333.60	171.90	133.29
20	122.00	121.00	131.00	146.00	270.00	577.00	783.00	749.18	1054.21	366.86	163.33	131.96
21	120.00	118.00	123.00	140.00	283.00	740.00	735.00	942.57	926.41	357.58	158.39	133.29
22	117.00	114.00	126.00	133.00	300.00	773.00	1060.00	763.56	753.96	291.56	155.12	131.96
23	116.00	114.00	132.00	126.00	305.00	589.00	1043.00	716.24	688.66	283.61	153.60	133.29
24	116.00	112.00	128.00	128.00	286.00	666.00	1148.00	739.69	639.70	273.25	152.04	131.96
25	118.00	111.00	131.00	133.00	297.00	675.00	1113.00	873.65	592.79	270.71	148.97	129.37
26	117.00	110.00	133.00	131.00	376.00	648.00	1450.00	894.55	536.06	253.35	148.97	123.17
27	114.00	112.00	133.00	149.00	328.00	548.00	1663.00	958.88	493.82	246.17	145.96	120.82
28	116.00	118.00	136.00	133.00	339.00	524.00	1548.00	1054.21	471.65	239.14	147.46	120.82
29	118.00	123.00	137.00	150.00	532.00	560.00	1410.00	1048.46	450.10	230.00	147.46	119.66
30	119.00		144.00	146.00	383.00	577.00	1160.00	1106.66	425.72	221.14	144.49	120.82
31	120.00		144.00		311.00		1430.00	1089.02		214.67		120.82
TOTAL	3718.00	3391.00	4154.00	4010.00	8534.00	16907.00	33185.00	25414.49	26335.58	10779.51	5233.07	4136.63
AVERAGE	119.94	116.93	134.00	133.67	275.29	563.57	1070.48	819.82	877.85	347.73	174.44	133.44
MAXIMUM	126.00	123.00	144.00	157.00	532.00	874.00	1663.00	1368.00	1265.94	666.15	214.67	145.96
MINIMUM	114.00	110.00	123.00	116.00	146.00	316.00	684.00	552.00	425.72	214.67	144.49	119.66

MAX- DATE (840727) 1663.00
35- DATE (840723) 1043.00
95- DATE (840814) 601.00
185- DATE (841109) 188.40
275- DATE (840309) 131.00
355- DATE (840218) 116.00
MIN- DATE (840226) 110.00

*ITEM(2)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
145798.28	398.36	1663.00	110.00

Discharge at Tumlingtar (1985)

(0604.5) 1985

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	121.99	113.10	140.16	125.60	124.38	444.40	739.69	868.46	1059.97	501.35	265.66	170.15
2	120.82	114.15	144.49	123.17	124.38	639.70	652.85	847.90	1077.35	478.98	263.17	170.15
3	121.99	110.05	143.03	125.60	170.15	471.65	652.85	858.15	1402.97	439.55	258.22	166.70
4	119.66	112.06	134.63	133.29	131.96	725.57	931.78	858.15	1464.00	432.60	253.35	163.33
5	119.66	114.15	145.96	123.17	137.36	425.72	853.02	812.58	1618.97	398.88	246.17	163.33
6	118.53	114.15	145.96	126.84	147.46	345.46	858.15	744.43	1291.46	389.09	275.82	161.66
7	119.66	114.15	147.46	129.37	134.63	408.82	921.05	652.85	1003.13	369.98	248.54	160.02
8	118.53	115.22	138.75	123.17	125.60	333.60	986.41	618.12	847.90	354.53	239.14	160.02
9	116.30	113.10	140.16	134.63	130.66	592.79	958.88	592.79	739.69	357.58	253.35	158.39
10	116.30	110.05	141.58	177.25	135.98	512.77	991.96	613.85	720.89	464.40	243.81	156.77
11	117.41	112.06	145.96	165.01	137.36	373.13	802.64	609.61	753.96	422.30	239.14	155.18
12	116.30	114.15	143.03	147.46	180.90	333.60	937.16	697.79	706.98	369.98	230.00	152.04
13	115.22	115.22	143.03	144.49	148.97	322.02	1071.54	609.61	684.13	382.66	221.14	150.49
14	115.22	116.30	135.98	148.97	221.14	379.46	1470.86	853.02	832.66	366.86	214.67	147.46
15	116.30	113.10	131.96	134.63	168.42	493.82	1363.06	778.09	693.22	339.49	210.44	148.97
16	113.10	115.22	128.09	130.66	153.60	568.07	1297.89	778.09	716.24	351.49	206.28	152.04
17	111.05	110.05	121.99	126.84	148.97	969.84	1464.00	661.70	758.75	921.05	204.22	148.97
18	111.05	113.10	121.99	125.60	138.75	1083.18	1083.18	792.77	706.98	1259.60	196.18	147.46
19	112.06	117.41	116.30	129.37	158.39	666.15	1031.33	1356.46	842.81	555.94	192.25	144.49
20	111.05	125.60	115.22	133.29	148.97	613.85	1094.89	980.87	782.96	460.80	188.40	147.46
21	111.05	120.82	115.22	141.58	186.50	613.85	1071.54	953.42	675.10	422.30	186.50	143.03
22	112.06	117.41	120.82	144.49	171.90	644.06	1077.35	1228.16	631.01	373.13	188.40	140.16
23	111.05	133.29	124.38	175.45	158.39	520.46	1209.50	1389.60	693.22	348.46	186.50	139.75
24	111.05	133.29	118.53	171.90	156.77	711.60	1130.42	1491.56	639.70	333.60	186.50	137.36
25	111.05	128.09	120.82	152.04	158.39	679.61	1240.69	1554.58	739.69	324.89	184.61	134.63
26	111.05	128.09	119.66	135.98	389.09	693.22	1191.00	1037.03	730.26	316.33	182.75	131.96
27	110.05	124.38	124.38	131.96	270.71	858.15	1505.45	980.87	648.45	310.70	180.90	140.16
28	109.06	128.09	126.84	125.60	588.62	868.46	1491.56	937.16	622.40	302.40	177.25	161.66
29	110.05		131.96	126.84	363.75	684.13	1178.75	931.78	622.40	294.25	173.66	145.96
30	111.05		131.96	126.84	385.87	807.60	991.96	1020.00	540.00	281.00	170.15	140.16
31	110.05		143.03		453.65		884.06	1031.33		270.71		137.36
TOTAL	3549.77	3295.85	4103.33	4141.09	6251.67	17804.74	33135.47	28140.78	25247.25	13194.88	6467.17	4676.27
AVERAGE	114.51	117.71	132.37	138.04	201.67	593.49	1068.89	907.77	841.58	425.64	215.57	150.85
MAXIMUM	121.99	133.29	147.46	177.25	588.62	1083.18	1505.45	1554.58	1618.97	1259.60	275.82	170.15
MINIMUM	109.06	110.05	115.22	123.17	124.38	322.02	652.85	592.79	540.00	270.71	170.15	131.96

MAX-	DATE < 850905 >	1618.97
35-	DATE < 850710 >	991.96
95-	DATE < 850927 >	648.45
185-	DATE < 851124 >	186.50
275-	DATE < 850427 >	131.96
355-	DATE < 850124 >	111.05
MIN-	DATE < 850128 >	109.06

*ITEM(2)

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
150008.27	410.98	1618.97	109.06

Discharge at Dam Site (1975)

1975

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	104.72	82.36	65.26	52.56	43.27	348.27	643.83	824.63	683.29	473.13	227.96	126.28
2	141.58	79.32	65.26	50.19	40.69	231.88	512.44	768.20	574.93	229.08	217.61	124.28
3	125.19	79.32	65.26	50.19	135.47	218.02	538.44	1021.93	640.88	502.79	211.19	120.57
4	104.72	79.32	65.26	50.19	164.11	231.39	610.93	772.75	786.52	463.64	201.19	118.57
5	101.49	79.32	62.57	50.19	127.76	237.54	664.44	779.43	888.96	417.89	205.81	117.86
6	101.49	79.32	62.57	54.93	139.25	247.79	690.84	793.54	846.44	410.12	195.42	119.86
7	98.12	76.45	62.57	52.56	172.69	344.03	809.20	653.67	887.44	388.33	191.96	115.86
8	98.12	76.45	62.57	54.93	116.60	345.71	932.13	636.75	980.20	346.32	191.53	115.16
9	98.12	76.45	62.57	52.56	155.53	298.88	735.59	591.03	948.19	377.12	186.07	113.16
10	98.12	76.45	62.57	50.19	127.76	231.23	777.91	566.83	802.81	401.80	179.07	109.16
11	94.89	76.45	62.57	50.19	191.60	291.48	647.26	727.48	706.83	750.08	175.64	108.45
12	94.89	73.54	60.02	50.19	172.69	319.48	695.02	810.67	683.44	385.37	170.64	108.45
13	94.89	73.54	60.02	50.19	407.13	120.88	791.93	668.93	930.48	341.90	170.14	106.45
14	91.66	73.54	60.02	47.75	190.87	980.93	667.34	617.78	1096.88	324.72	169.59	107.70
15	91.66	73.54	60.02	47.75	143.35	240.72	564.59	716.81	871.96	325.35	169.59	107.70
16	91.66	70.67	60.02	47.75	120.20	312.13	573.79	705.53	901.26	1001.13	162.59	107.70
17	91.66	70.67	57.48	47.75	758.74	321.75	565.54	773.46	860.43	292.46	162.09	108.95
18	91.66	70.67	57.48	47.75	140.66	440.48	640.25	756.88	888.63	279.40	157.09	105.95
19	88.47	70.67	57.48	47.75	350.56	433.03	617.20	711.17	677.66	280.34	152.54	101.13
20	88.47	67.99	57.48	82.36	272.01	600.79	618.90	723.69	972.32	270.48	154.00	101.13
21	88.47	67.99	57.48	57.48	266.52	786.36	890.56	682.24	813.15	261.50	150.37	101.13
22	89.47	67.99	54.93	62.57	250.39	680.48	865.72	668.85	703.34	252.48	148.37	98.33
23	85.42	67.99	54.93	60.02	214.72	696.19	713.96	649.44	613.26	244.15	147.78	98.33
24	85.42	67.99	54.93	137.53	234.79	671.27	906.79	564.26	556.90	239.73	141.78	92.38
25	85.42	65.26	54.93	0.0	219.52	820.26	968.20	593.88	517.90	235.40	130.28	93.51
26	85.42	65.26	54.93	108.27	195.49	684.15	917.93	540.46	550.29	411.40	129.57	91.51
27	85.42	65.26	54.93	76.45	196.25	679.59	988.93	513.88	843.63	317.18	131.57	92.72
28	82.36	65.26	52.56	129.92	204.94	656.20	782.97	529.06	632.36	336.96	130.94	92.72
29	82.36		52.56	82.36	224.50	553.02	753.43	488.02	489.48	274.43	130.94	92.72
30	82.36		52.56	67.99	284.34	503.43	734.29	479.79	453.02	254.21	130.28	89.72
31	82.36		52.56		553.79		739.84	482.06		227.56		89.72
TOTAL	2915.06	2039.04	1826.35	1820.51	6866.18	13567.36	22549.99	20813.00	22802.78	11315.94	5023.52	3277.26
AVERAGE	94.03	72.82	58.91	60.68	221.49	452.25	727.42	671.39	760.09	365.03	167.45	105.72
MAXIMUM	141.58	82.36	65.26	137.53	758.74	980.93	988.93	1021.93	1096.88	1001.13	227.96	126.28
MINIMUM	82.36	65.26	52.56	0.0	60.69	120.88	512.44	479.79	453.02	227.56	129.57	89.72

MAX- DATE < 750914 > 1096.88
95- DATE < 750805 > 779.43
90- DATE < 750629 > 553.02
75- DATE < 751114 > 169.59
25- DATE < 750129 > 82.36
10- DATE < 750410 > 50.19
MIN- DATE < 750425 > 0.0
ITEM (1)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
114816.99	314.57	1096.88	0.0

Discharge at Dam Site (1976)

1976

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	84.85	70.35	80.43	87.08	63.32	206.53	1107.21	576.43	559.32	348.50	206.85	153.54
2	84.85	81.35	92.43	86.08	188.23	179.19	821.29	613.05	625.03	346.73	201.27	141.71
3	84.85	76.35	82.40	84.08	127.71	206.67	1117.29	582.30	640.20	395.91	202.60	141.71
4	84.85	75.44	106.40	87.08	260.53	402.96	761.72	731.35	624.63	311.60	197.60	144.88
5	83.98	85.11	104.40	87.93	177.20	423.96	833.96	698.90	586.48	331.13	196.93	140.88
6	87.98	77.21	114.40	86.93	119.59	392.34	708.43	674.32	556.84	294.64	195.60	136.88
7	83.98	76.30	102.40	96.93	117.90	464.96	649.35	779.49	682.96	315.91	195.60	140.05
8	81.98	76.30	90.40	86.93	161.17	389.96	534.97	623.43	769.81	370.14	189.60	138.05
9	80.98	79.35	88.40	91.93	117.57	602.02	757.81	572.70	670.89	373.28	187.60	135.15
10	78.98	79.35	91.41	102.93	111.92	339.42	619.59	688.42	579.70	328.13	187.60	131.15
11	82.11	76.35	85.41	111.93	115.55	1099.16	609.63	809.01	560.90	307.50	186.89	138.28
12	80.11	67.11	85.41	95.93	55.36	1023.34	742.74	515.15	532.42	293.72	182.89	134.28
13	80.13	79.35	86.34	102.93	110.15	678.63	655.21	552.87	569.89	281.81	182.89	134.28
14	78.11	77.35	83.34	119.93	128.54	1229.93	619.18	567.84	550.90	277.12	177.89	125.28
15	77.21	77.35	92.34	111.93	132.57	605.61	667.63	559.63	540.70	276.78	179.19	122.37
16	77.21	78.44	93.34	94.82	151.54	691.99	799.61	548.63	477.37	272.78	174.19	116.37
17	77.21	73.44	93.34	108.82	125.86	734.67	825.56	624.54	476.30	254.58	172.19	121.46
18	77.21	74.41	91.26	103.82	144.25	793.02	694.63	740.20	438.87	253.16	173.44	123.45
19	79.72	78.41	87.26	96.82	150.85	1044.61	638.35	697.81	572.43	242.69	168.44	117.46
20	74.11	83.41	91.26	114.82	160.02	613.83	586.36	769.81	392.76	231.27	166.44	116.55
21	74.21	85.41	89.26	133.46	164.15	475.78	582.90	1041.63	384.02	229.30	161.73	116.55
22	72.21	86.46	84.26	113.26	165.54	450.46	619.19	1130.63	493.13	224.30	165.73	116.55
23	70.21	82.46	80.26	119.26	549.76	538.78	553.32	1134.93	485.87	230.33	164.90	118.55
24	75.21	75.46	86.19	133.34	213.54	449.56	551.89	1071.54	433.30	223.02	162.90	117.60
25	76.30	80.43	95.08	144.26	170.86	413.79	523.63	1159.20	359.37	219.27	164.16	114.60
26	76.30	92.43	93.08	154.44	154.15	499.61	479.26	780.59	372.02	263.79	164.16	114.60
27	76.30	85.43	96.08	122.13	142.46	504.83	614.74	666.21	447.43	218.79	164.16	114.60
28	76.30	72.43	91.08	125.38	167.06	648.56	550.19	680.70	397.13	211.78	170.16	108.60
29	78.30	74.43	91.08	125.57	264.83	687.90	607.32	676.35	374.19	208.20	163.37	109.61
30	77.35		86.08	136.09	255.94	853.83	634.43	721.26	364.25	207.65	155.54	109.61
31	72.35		87.08		224.39		629.32	603.97		204.07		107.61
TOTAL	2445.43	2277.67	2821.90	3266.84	5192.51	17645.90	21096.61	22592.89	15518.11	8547.88	5362.51	3902.27
AVERAGE	78.88	78.54	91.03	108.89	167.50	588.20	680.54	728.80	517.27	275.74	178.75	125.88
MAXIMUM	87.98	92.43	114.40	154.44	549.76	1229.93	1117.29	1159.20	769.81	395.91	206.85	153.54
MINIMUM	70.21	67.11	80.26	84.08	55.36	179.19	479.26	515.15	359.37	204.07	155.54	107.61

MAX- DATE < 760614 > 1229.93
75- DATE < 760810 > 688.42
95- DATE < 760626 > 499.61
185- DATE < 761122 > 165.73
275- DATE < 760226 > 92.43
355- DATE < 760219 > 74.41
MIN- DATE < 760512 > 55.36

*ITEM(1)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
110670.52	302.38	1229.93	55.36

Discharge at Dam Site (1977)

1977

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	103.61	98.51	116.92	144.51	157.84	422.20	522.46	837.89	762.70	598.78	233.60	185.73
2	104.66	98.51	108.92	118.15	164.39	258.90	493.43	971.19	755.32	222.43	238.60	178.73
3	104.66	99.48	116.92	161.54	175.94	352.02	739.07	1139.36	714.05	901.99	244.27	170.90
4	104.66	101.48	121.77	131.07	157.18	378.15	628.63	855.87	607.19	633.40	366.60	168.16
5	104.66	105.51	125.73	0.0	157.34	255.05	580.43	791.72	635.05	642.60	181.12	169.37
6	103.63	101.48	97.92	138.07	167.39	285.89	677.43	796.59	897.89	540.46	257.79	174.54
7	103.63	93.48	114.92	177.90	192.09	397.25	488.49	831.54	691.13	632.55	243.07	166.54
8	103.63	88.48	118.92	168.55	161.84	430.58	1030.35	758.18	596.65	488.55	215.12	159.54
9	103.63	84.48	126.92	172.88	155.94	503.55	737.26	866.02	575.43	438.19	257.27	149.71
10	103.63	93.48	122.92	153.78	158.84	334.87	794.48	711.97	596.55	428.73	238.65	150.88
11	101.63	98.41	141.92	120.31	157.39	301.56	746.96	668.87	634.46	398.24	222.81	155.88
12	106.64	76.41	177.92	157.15	156.41	626.36	752.54	542.19	632.13	379.72	220.79	144.05
13	104.64	96.41	164.92	139.12	152.84	649.19	679.29	864.57	544.43	368.15	197.69	150.05
14	104.64	104.25	141.64	134.58	166.17	705.15	719.54	800.15	486.36	360.15	208.39	151.15
15	102.64	120.25	125.25	149.16	0.0	391.90	626.30	1126.84	499.87	349.81	200.81	140.54
16	102.64	124.25	153.14	149.60	58.02	367.57	688.43	1086.12	654.43	356.39	205.79	117.88
17	100.64	128.14	144.14	143.60	162.87	315.02	754.65	943.90	585.19	330.58	201.79	143.15
18	100.64	132.14	145.03	146.19	114.30	404.08	686.21	736.87	501.48	311.69	202.65	145.37
19	98.64	123.14	131.03	147.44	197.25	474.76	752.21	625.49	575.29	299.12	199.07	143.37
20	98.64	130.14	116.03	152.73	178.43	546.02	1160.42	621.20	492.63	300.69	193.48	142.46
21	95.64	113.14	106.92	191.27	163.46	535.90	1292.37	817.43	492.87	284.91	192.85	135.46
22	96.61	108.03	112.92	152.31	167.63	467.76	1448.37	809.59	512.34	292.79	188.60	135.46
23	96.61	108.03	121.73	150.19	172.59	448.87	1006.07	701.67	492.87	278.33	189.93	139.55
24	96.61	106.03	127.73	114.39	187.19	505.08	948.30	1081.52	481.19	271.20	191.31	132.55
25	99.58	112.03	133.58	125.16	197.19	461.55	875.65	1156.17	433.19	269.65	192.60	132.55
26	99.58	110.03	133.92	116.01	234.19	424.57	751.87	1479.73	406.43	277.45	182.60	126.55
27	97.58	110.03	124.92	135.27	214.25	404.02	752.89	1136.17	382.76	265.33	183.89	144.60
28	97.58	108.03	116.58	203.20	174.54	506.25	793.65	961.43	381.46	249.65	181.19	136.88
29	96.51		120.58	173.07	126.43	515.08	710.19	869.43	380.36	251.07	181.19	128.15
30	92.51		135.58	154.48	219.62	494.48	768.13	791.63	510.43	252.48	182.44	129.46
31	96.51		171.64		434.70		974.13	764.21		249.85		125.46
TOTAL	3127.11	2973.78	4018.94	4321.68	5294.26	13183.63	24578.20	27043.51	16902.11	11923.82	6395.95	4574.67
AVERAGE	100.87	106.21	129.64	144.06	170.78	439.45	792.85	872.37	563.40	384.64	213.20	147.57
MAXIMUM	106.64	132.14	177.92	203.20	434.70	705.15	1448.37	1479.73	897.89	901.99	366.60	185.73
MINIMUM	92.51	76.41	97.92	0.0	0.0	255.05	488.49	542.19	380.36	222.43	181.12	117.88

MAX- DATE < 770826 > 1479.73
35- DATE < 770730 > 768.13
95- DATE < 770915 > 499.87
185- DATE < 771123 > 189.93
275- DATE < 771230 > 129.46
355- DATE < 770213 > 96.41
MIN- DATE < 770515 > 0.0

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
124337.66	340.65	1479.73	0.0

Discharge at Dam Site (1978)

1978

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	125.60	114.48	138.73	134.41	238.83	347.36	636.02	807.49	565.19	502.43	229.65	152.19
2	129.60	119.41	139.92	130.03	255.79	308.65	607.21	965.46	560.43	444.78	228.78	162.60
3	128.61	115.41	137.92	132.92	273.04	283.46	621.02	905.03	503.65	399.53	221.78	150.89
4	124.61	115.41	142.73	151.58	285.01	275.32	550.20	1047.73	514.42	386.70	215.20	143.19
5	121.66	111.41	142.73	168.58	229.90	331.08	586.63	964.72	586.65	434.99	214.65	144.44
6	116.66	114.25	134.73	158.58	244.94	358.89	538.96	1003.62	519.05	626.99	209.07	148.73
7	116.66	116.25	143.58	149.58	252.90	320.37	520.34	896.72	510.36	449.64	206.07	142.90
8	120.63	120.25	141.58	156.58	235.04	728.89	570.62	1216.43	521.87	432.28	206.07	142.90
9	120.63	116.25	133.58	169.35	211.94	536.74	510.18	1065.03	536.74	386.69	203.48	140.16
10	120.63	112.25	143.58	202.35	314.95	1150.34	491.32	985.63	528.20	368.70	193.48	138.16
11	117.63	110.25	147.58	184.14	243.04	1160.43	441.13	969.57	617.20	349.46	192.85	135.37
12	116.64	113.14	177.55	172.37	256.04	1259.55	595.89	1017.03	748.81	351.13	191.27	133.37
13	116.64	121.14	143.48	193.48	200.41	617.37	569.70	945.97	826.47	343.73	187.27	134.54
14	123.64	119.14	132.14	180.51	277.84	482.29	664.07	857.20	1052.34	336.50	191.85	129.54
15	116.64	125.14	131.92	202.41	308.83	445.34	555.65	789.02	848.15	317.45	182.85	128.71
16	117.61	132.14	137.92	225.48	417.60	523.34	636.63	856.13	719.20	309.81	182.27	124.71
17	119.61	159.41	141.92	217.48	408.96	465.74	831.15	664.48	605.36	314.46	168.78	125.88
18	119.61	143.25	168.25	242.93	419.96	451.54	879.72	594.61	175.47	292.78	166.69	119.88
19	119.61	136.14	164.48	195.66	434.79	652.90	876.54	623.87	812.52	290.01	207.65	117.88
20	121.58	116.03	157.14	205.46	387.11	467.17	703.43	597.96	568.02	281.79	199.78	123.05
21	123.58	118.03	149.92	197.48	343.48	521.18	860.84	575.35	517.81	281.16	175.20	124.15
22	131.58	118.03	141.92	181.41	352.30	578.03	647.63	635.70	513.74	275.58	167.65	124.15
23	131.58	118.92	138.73	165.60	308.57	746.93	742.19	598.26	494.90	261.16	174.48	120.15
24	119.51	128.92	141.58	207.65	287.55	676.19	715.99	587.72	490.43	257.69	173.27	116.15
25	119.51	128.92	137.58	201.05	270.46	620.62	511.59	671.15	508.36	251.27	158.60	112.15
26	119.51	132.92	134.35	221.27	317.32	636.20	541.73	694.29	524.36	245.81	154.60	113.28
27	119.61	135.92	144.35	180.15	145.25	632.63	623.33	627.35	468.87	242.30	157.31	108.28
28	119.51	137.92	141.19	194.61	315.34	628.26	995.61	665.70	448.19	237.79	140.60	108.28
29	117.51		143.19	229.61	286.74	611.18	763.63	636.32	431.43	230.33	138.60	110.28
30	115.51		147.19	176.60	300.13	611.18	702.87	590.36	437.90	235.33	150.89	107.37
31	116.48		137.48		294.89		786.01	601.07		233.20		107.37
TOTAL	3748.39	3450.73	4458.94	5529.31	9208.95	17429.17	20277.83	24656.97	17146.09	10371.46	5590.69	3990.70
AVERAGE	120.92	123.24	143.84	184.31	297.06	580.97	654.12	795.39	571.54	334.56	186.36	128.73
MAXIMUM	131.58	159.41	177.55	242.93	434.79	1259.55	995.61	1216.43	1052.34	626.99	229.65	162.60
MINIMUM	115.51	110.25	131.92	130.03	145.25	275.32	441.13	575.35	175.47	230.33	138.60	107.37

MAX-	DATE < 780612 >	1259.55
35-	DATE < 780916 >	719.20
95-	DATE < 780921 >	517.81
185-	DATE < 781102 >	228.78
275-	DATE < 781210 >	179.16
355-	DATE < 781226 >	113.28
MIN-	DATE < 781231 >	107.37

*ITEM(1)

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
125959.23	344.82	1259.55	107.37

Discharge at Dam Site (1979)

1979

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	104.18	85.29	97.58	128.42	0.0	194.34	1287.12	1236.05	576.84	306.93	242.90	200.10
2	104.18	85.29	97.58	148.06	173.51	213.07	1158.49	958.72	623.14	309.83	240.36	440.11
3	101.43	86.05	104.86	165.06	217.39	210.55	954.05	907.72	929.41	420.48	234.42	174.52
4	105.43	86.05	104.86	173.06	228.36	218.33	880.58	687.09	834.61	585.76	230.91	170.77
5	98.28	82.05	116.86	186.06	223.47	222.39	602.17	600.79	570.85	633.78	222.92	164.02
6	98.28	86.05	120.86	136.26	194.05	221.60	662.44	565.55	325.31	812.54	218.89	159.87
7	94.64	91.56	120.86	144.97	180.72	206.54	527.04	596.56	355.11	572.38	216.32	156.68
8	95.45	105.02	113.55	148.87	172.18	249.73	520.22	677.73	607.90	533.82	215.29	155.08
9	95.45	92.06	105.55	161.87	203.80	242.39	505.16	630.77	586.88	568.54	210.29	147.89
10	97.45	86.83	87.79	155.97	188.78	194.77	572.70	747.63	613.07	612.75	0.0	156.70
11	97.45	89.96	84.79	171.96	186.38	205.55	610.95	814.00	467.39	647.58	222.98	142.06
12	98.26	87.96	91.79	171.84	197.44	232.28	719.64	1125.77	701.98	494.14	198.59	140.06
13	98.26	96.73	94.79	155.31	298.30	210.44	847.47	1021.29	614.52	443.74	194.59	148.26
14	100.26	96.73	113.79	152.40	224.67	252.27	812.62	958.02	859.62	412.05	190.52	139.26
15	104.26	96.73	98.79	156.96	234.75	352.86	830.33	878.02	447.02	402.61	190.96	132.06
16	105.06	100.50	105.79	170.14	248.53	416.48	709.77	828.34	423.68	374.67	140.78	134.83
17	101.06	99.82	97.48	171.68	352.21	303.90	625.79	783.51	436.27	360.27	187.78	135.19
18	103.06	100.82	122.48	134.41	322.16	264.74	673.73	736.04	421.47	319.88	187.78	135.96
19	94.43	101.14	131.48	122.96	365.13	334.12	633.99	632.80	411.54	339.57	184.85	135.96
20	99.43	128.87	116.48	127.74	263.65	315.74	705.05	695.36	361.02	323.21	185.78	136.73
21	91.19	121.87	106.48	121.71	255.67	600.70	992.05	1317.34	377.77	299.85	186.63	137.05
22	91.19	86.60	127.37	173.25	244.66	296.24	807.73	970.92	485.44	310.94	185.03	135.82
23	87.19	97.88	111.37	135.21	222.70	361.13	1811.73	843.27	407.51	291.58	185.03	130.55
24	87.19	91.61	119.37	135.62	224.67	350.28	1374.17	717.87	368.02	292.37	183.03	132.55
25	89.52	82.61	116.01	154.80	201.57	402.00	1052.12	600.66	332.23	284.08	180.92	136.87
26	96.29	82.61	120.01	163.61	188.39	336.24	988.72	659.80	334.50	277.65	178.92	142.87
27	94.29	89.89	124.90	190.17	208.55	565.25	989.06	631.99	352.91	268.22	177.77	143.60
28	96.29	91.89	112.90	174.67	176.75	512.26	1211.17	606.93	375.51	260.55	185.48	139.88
29	95.24		118.90	129.36	200.52	535.64	1079.31	658.17	331.17	250.22	172.92	133.88
30	86.19		108.66	142.60	194.87	674.51	931.99	633.50	277.83	254.83	198.15	139.88
31	0.0		122.25		195.60		1098.91	607.08		248.37		143.88
TOTAL	2910.88	2630.47	3416.23	4604.90	6789.52	9706.29	27176.27	24409.29	14810.46	12513.09	5750.79	4822.94
AVERAGE	93.90	93.95	110.20	153.50	219.02	323.54	876.65	787.40	493.68	403.65	191.69	155.58
MAXIMUM	105.43	128.87	131.48	190.17	365.13	674.51	1811.73	1317.34	929.41	812.54	242.90	440.11
MINIMUM	0.0	82.05	84.79	121.71	0.0	194.34	505.16	565.55	277.83	248.37	0.0	130.55

MAX- DATE < 790723 > 1811.73
35- DATE < 790817 > 793.51
95- DATE < 790918 > 421.47
185- DATE < 790512 > 197.44
275- DATE < 790327 > 124.90
355- DATE < 790204 > 86.05
MIN- DATE < 791110 > 0.0

(1)

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
119541.13	327.51	1811.73	0.0

Discharge at Dam Site (1980)

1980

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	138.89	117.51	187.15	166.92	190.30	199.83	837.05	890.97	1742.37	662.14	265.60	152.55
2	134.89	138.51	166.92	169.26	208.83	222.08	749.89	685.15	954.35	845.46	266.89	156.55
3	129.58	119.51	138.49	165.83	220.84	251.11	768.53	879.63	1516.19	643.91	248.19	153.60
4	127.58	119.51	143.31	169.83	224.73	322.49	713.55	879.19	1232.63	632.45	261.44	171.60
5	126.55	117.51	140.67	161.83	297.76	388.39	741.76	876.63	1564.37	544.50	257.44	164.60
6	126.55	118.15	159.67	165.83	263.73	352.11	760.07	931.26	1187.81	559.81	226.73	161.61
7	123.55	116.15	162.52	185.82	246.57	485.56	750.42	972.96	1101.90	525.46	222.73	158.61
8	119.55	110.15	154.69	197.39	250.01	385.34	724.32	989.21	994.36	491.12	212.90	155.66
9	122.23	109.76	154.69	200.82	230.29	500.88	959.32	1083.07	1001.63	491.02	219.90	152.66
10	120.23	112.76	129.85	195.12	203.25	529.18	739.87	989.90	1472.74	513.78	225.16	145.66
11	122.48	116.76	127.85	169.80	224.59	378.11	572.02	1016.89	996.48	491.01	211.37	129.63
12	120.48	112.76	128.46	176.22	216.36	379.60	563.37	962.21	934.56	463.27	207.37	129.63
13	119.16	116.76	122.46	196.60	210.85	258.26	567.96	1058.54	555.06	473.27	212.54	129.63
14	117.16	148.32	133.02	210.07	194.95	406.59	696.43	1133.49	1440.90	446.30	208.54	123.64
15	117.16	120.76	133.02	201.76	184.55	29.35	799.63	1912.21	1740.43	416.81	201.54	130.64
16	117.16	140.49	144.59	197.43	208.43	770.13	863.42	1440.02	1235.97	379.39	197.54	124.61
17	117.81	127.49	144.02	192.03	200.11	601.43	1164.89	1859.02	1118.20	383.81	194.71	118.61
18	117.81	130.31	142.02	179.03	173.09	513.76	1116.90	2017.72	997.96	371.78	194.71	115.61
19	115.81	116.92	156.02	200.68	189.84	604.87	1373.43	1297.47	1035.54	371.78	192.88	116.58
20	116.01	116.92	153.93	222.45	194.84	569.87	830.87	1403.13	843.81	382.20	195.88	112.58
21	118.01	139.31	150.45	228.15	65.02	564.19	909.02	1531.62	853.07	418.07	183.05	116.58
22	118.01	139.92	212.88	230.87	288.74	551.43	719.87	1559.02	806.37	381.48	183.05	113.51
23	118.66	129.49	173.05	268.56	279.32	609.42	1006.61	1347.62	766.42	360.85	187.15	110.51
24	114.66	152.49	175.55	239.51	230.46	558.49	817.35	1364.84	661.89	368.79	177.28	117.51
25	114.66	159.49	181.15	226.25	224.13	644.54	661.81	1361.35	661.87	322.30	170.28	112.66
26	116.66	136.49	176.15	219.78	255.34	545.18	654.36	1528.26	754.43	319.20	163.28	118.48
27	116.66	136.69	169.28	200.43	218.49	661.81	515.03	1347.02	716.05	302.48	164.37	111.48
28	118.66	136.69	158.46	190.37	214.49	618.32	658.43	1770.49	642.35	314.27	164.37	112.41
29	119.26	144.69	170.58	218.93	213.39	588.42	716.48	1484.70	681.54	315.60	158.46	112.41
30	115.26		169.14	202.00	202.48	592.19	865.97	1361.62	775.05	274.93	162.46	112.41
31	115.26		163.26		195.48		923.95	1453.89		268.31		104.25
TOTAL	3736.40	3702.27	4823.30	5949.57	6721.26	14082.93	24742.53	39389.10	30986.25	13735.55	6137.81	4046.47
AVERAGE	120.53	127.66	155.59	198.32	216.81	469.43	798.15	1270.62	1032.88	443.08	204.59	130.53
MAXIMUM	138.89	159.49	212.88	268.56	297.76	770.13	1373.43	2017.72	1742.37	845.46	266.89	171.60
MINIMUM	114.66	109.76	122.46	161.83	65.02	29.35	515.03	685.15	555.06	268.31	158.46	104.25

MAX-	DATE < 800818 >	2017.72
35-	DATE < 800919 >	1035.54
95-	DATE < 800628 >	618.32
185-	DATE < 800529 >	213.39
275-	DATE < 800229 >	144.69
355-	DATE < 801225 >	112.66
MIN-	DATE < 800615 >	29.35

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
158053.44	431.94	2017.72	29.35

Discharge at Dam Site (1981)

1981

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	107.25	105.35	122.91	158.92	158.83	307.07	1305.19	928.43	903.26	358.45	166.37	111.61
2	143.25	108.35	145.18	131.92	212.94	357.13	1325.19	1034.94	636.35	369.12	164.37	117.61
3	98.14	102.35	138.91	144.35	200.94	530.09	1244.26	969.19	877.20	363.46	164.37	115.65
4	111.14	90.35	125.91	208.19	241.17	484.18	1214.54	985.20	680.81	329.01	162.37	113.65
5	105.14	100.19	114.60	197.03	225.17	486.87	1172.19	1119.84	732.49	343.59	251.54	118.66
6	118.03	97.19	136.60	181.69	315.55	364.53	959.87	988.29	764.54	339.16	174.54	114.63
7	102.03	119.19	132.91	171.46	301.18	315.58	820.43	924.96	635.61	295.81	162.71	113.63
8	99.03	113.19	137.24	138.91	259.94	306.49	611.26	902.49	993.34	272.79	148.71	109.63
9	95.14	103.19	127.24	142.91	269.96	323.09	775.30	919.36	1012.34	249.33	147.88	106.63
10	101.14	94.96	118.24	138.41	299.83	342.84	747.19	785.32	879.74	258.79	147.88	106.64
11	96.03	94.96	110.60	197.19	331.17	335.18	716.46	1464.62	854.35	235.20	142.88	107.64
12	98.69	94.96	104.60	162.03	289.17	391.84	939.43	1554.99	705.84	238.07	138.05	107.61
13	112.92	100.96	107.60	167.58	213.84	611.73	645.02	1152.43	739.65	223.48	141.15	108.61
14	90.92	97.96	106.96	170.69	237.43	720.57	867.05	1258.36	928.15	226.85	125.31	107.61
15	93.92	120.69	129.18	295.54	273.48	697.32	948.36	1155.54	732.34	219.60	132.54	104.61
16	93.92	110.69	152.19	189.60	195.45	844.55	917.35	1152.37	760.35	207.93	130.71	101.61
17	99.92	117.69	156.69	249.88	319.58	657.88	979.74	721.52	608.63	213.60	121.88	102.58
18	94.73	133.69	134.46	272.51	301.18	654.08	990.59	860.03	620.19	200.60	124.88	99.58
19	94.73	127.46	108.46	252.14	319.17	546.48	910.63	870.42	538.37	199.89	129.05	95.58
20	91.73	168.46	183.18	261.03	323.96	604.83	891.26	894.34	536.30	194.89	128.05	93.51
21	97.73	144.46	197.91	197.92	309.31	665.39	921.26	1047.43	509.87	196.19	119.15	101.51
22	97.73	144.46	224.69	219.92	343.84	595.18	1102.72	1101.90	527.76	200.44	114.37	96.51
23	94.73	145.18	169.18	98.70	312.15	582.46	1008.74	1033.93	413.19	197.44	117.28	97.51
24	87.58	122.18	164.24	224.19	258.45	849.30	1160.62	898.52	422.25	201.73	116.37	99.48
25	98.14	155.18	126.73	198.46	278.41	740.15	997.87	953.63	380.53	189.73	117.46	99.48
26	94.73	138.18	140.24	187.66	281.49	789.32	914.61	868.87	361.15	189.73	114.46	98.48
27	85.73	132.91	124.46	176.66	265.57	1094.29	955.34	767.29	355.74	201.73	116.55	97.41
28	98.58	145.91	122.91	192.51	378.02	1039.81	1157.12	818.54	451.74	179.90	113.55	97.41
29	101.58		129.91	183.41	320.94	958.70	936.72	940.36	475.74	176.16	113.60	97.41
30	95.58		123.69	135.27	268.11	904.54	989.17	1007.63	459.74	174.16	111.60	97.41
31	130.58		136.69		283.60		1130.01	744.03		175.37		97.25
TOTAL	3130.49	3339.29	4254.31	5646.68	8589.83	18101.42	30255.49	30724.67	19497.56	7402.18	4158.63	3242.16
AVERAGE	100.98	119.26	137.24	188.22	277.09	603.38	975.98	991.12	649.92	238.78	138.62	104.59
MAXIMUM	143.25	168.46	224.69	295.54	378.02	1094.29	1325.19	1554.99	1012.34	369.12	251.54	118.66
MINIMUM	85.73	94.96	104.60	98.70	158.83	306.49	611.26	721.52	355.74	174.16	111.60	95.58

MAX-	DATE < 810812 >	1554.99
35-	DATE < 810629 >	958.70
95-	DATE < 810620 >	604.83
185-	DATE < 810421 >	197.92
275-	DATE < 810310 >	119.24
355-	DATE < 810212 >	94.96
MIN-	DATE < 810127 >	85.73

*ITEM(1)

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
138342.71	379.02	1554.99	85.73

Discharge at Dam Site (1982)

1982

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	94.25	95.58	118.96	145.37	158.46	231.07	524.43	485.02	462.74	202.28	95.78	73.27
2	93.25	97.58	125.58	140.28	191.46	163.36	462.19	472.63	382.63	185.50	87.78	66.60
3	97.25	93.35	131.35	174.51	117.87	283.03	535.43	429.54	394.90	192.24	95.20	69.60
4	100.14	93.73	128.35	169.25	170.84	304.74	617.07	461.59	386.96	177.72	92.20	67.93
5	97.14	92.73	118.35	109.14	177.17	114.02	507.61	461.36	399.37	161.15	92.20	67.93
6	93.14	97.14	119.35	196.63	168.55	332.83	609.89	373.34	349.03	162.46	90.81	65.93
7	100.14	93.92	108.35	178.14	189.67	287.18	616.36	389.81	410.81	154.12	90.78	63.31
8	98.14	102.92	107.19	183.92	171.49	349.49	549.35	503.47	412.32	154.12	83.78	63.31
9	96.03	97.41	106.19	150.73	174.84	656.07	998.54	489.63	345.43	155.78	85.20	68.31
10	99.03	88.73	107.19	170.35	182.41	476.48	859.34	448.81	350.19	157.01	93.27	65.31
11	96.03	90.73	104.19	150.19	236.41	269.13	824.54	450.21	237.72	147.58	95.33	65.31
12	98.03	92.73	105.96	155.58	228.96	548.76	816.87	450.35	453.43	146.39	72.39	63.60
13	96.03	99.73	111.96	156.35	235.34	367.48	465.17	520.90	554.42	134.58	81.69	62.60
14	96.92	96.73	111.96	135.48	248.84	424.76	885.97	438.61	430.42	129.58	80.79	70.60
15	98.92	95.73	113.69	134.51	143.96	427.90	803.87	423.13	517.70	119.16	82.20	69.89
16	96.92	106.73	119.69	145.14	181.11	367.43	499.96	442.87	401.89	107.27	79.20	68.89
17	98.92	107.58	214.69	148.41	221.96	398.43	716.07	457.62	417.02	112.30	82.20	69.89
18	95.92	109.58	180.69	148.39	208.15	528.36	927.54	472.35	328.54	114.30	79.20	66.19
19	95.92	104.58	146.69	150.66	170.91	741.89	659.18	422.54	416.49	118.79	76.65	65.19
20	93.92	102.35	134.25	180.61	174.04	868.87	788.65	570.02	502.07	113.79	78.65	66.19
21	96.92	101.35	135.58	202.51	159.95	809.19	723.62	526.63	396.32	103.69	77.07	64.19
22	95.92	102.19	133.19	148.41	134.91	716.96	584.87	450.17	374.43	112.81	89.48	62.19
23	94.73	104.19	143.19	136.88	146.04	679.70	579.91	522.02	320.21	160.78	99.48	61.44
24	99.73	99.19	150.96	197.90	134.91	632.32	639.39	1288.81	322.19	134.58	83.48	65.44
25	92.73	99.19	156.35	212.61	155.04	686.54	699.88	606.35	346.19	115.16	83.85	63.44
26	91.73	102.96	136.35	174.37	184.04	738.05	869.97	837.81	312.65	112.69	75.85	63.44
27	93.73	106.96	121.58	150.46	215.79	690.87	914.42	1118.63	285.43	115.79	71.85	62.73
28	91.73	109.96	122.96	167.28	245.67	551.36	713.97	951.13	235.65	106.30	75.27	61.73
29	89.58		131.69	154.66	224.11	481.96	736.57	611.13	244.02	104.79	65.27	63.73
30	89.58		131.46	160.48	69.47	504.19	454.12	552.34	227.43	100.78	73.27	59.73
31	91.58		162.46		210.89		485.87	618.63		98.78		61.90
TOTAL	2964.00	2785.55	4040.40	4829.20	5623.26	14628.42	21070.62	17247.45	11218.60	4212.27	2510.17	2029.81
AVERAGE	95.61	99.48	130.34	160.97	181.40	487.61	679.70	556.37	373.95	135.88	83.67	65.48
MAXIMUM	100.14	109.96	214.69	212.61	248.84	868.87	998.54	1288.81	554.42	202.28	99.48	73.27
MINIMUM	89.58	88.73	104.19	109.14	69.47	114.02	454.12	373.34	227.43	98.78	65.27	59.73

MAX-	DATE < 820824 >	1288.81	
35-	DATE < 820829 >	611.13	
95-	DATE < 820904 >	396.96	
185-	DATE < 820418 >	148.39	
275-	DATE < 820116 >	96.92	
355-	DATE < 821225 >	63.44	
MIN-	DATE < 821230 >	59.73	

< ITEMS(1) >

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
93159.75	255.23	1288.81	59.73

Discharge at Dam Site (1983)

1983

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	59.90	58.88	69.37	87.55	114.94	208.83	595.30	591.20	348.63	411.49	170.74	109.81
2	61.90	59.88	67.37	105.55	114.43	296.09	797.20	508.02	598.47	495.00	159.74	109.67
3	58.90	58.88	67.37	97.55	114.43	321.25	1879.34	463.02	447.87	362.94	160.01	103.57
4	57.90	57.88	87.37	90.55	136.70	70.19	567.17	423.02	388.11	439.52	155.01	108.57
5	58.16	58.05	71.37	98.55	183.18	20.96	646.61	474.29	468.93	785.14	155.27	106.57
6	58.16	59.05	73.37	87.55	354.90	156.84	539.63	432.02	451.47	338.60	149.27	110.39
7	63.16	58.05	75.37	89.60	142.45	232.02	635.72	533.18	524.43	306.60	132.01	110.39
8	60.37	58.05	85.37	89.60	121.83	176.35	710.34	416.54	596.34	302.67	120.01	112.13
9	59.37	58.05	91.37	89.60	136.11	213.36	629.36	488.81	810.63	296.60	119.27	112.13
10	59.37	58.05	90.37	87.60	113.49	155.05	411.74	531.63	839.87	319.78	117.45	111.82
11	58.37	58.05	87.46	91.60	137.39	146.55	709.18	677.18	971.48	733.60	134.63	111.82
12	57.37	58.05	85.46	93.55	157.73	146.90	669.74	629.54	826.63	473.70	127.63	112.56
13	58.37	58.05	89.46	81.60	114.15	183.08	485.03	535.54	1239.63	503.55	136.77	109.56
14	59.37	59.05	86.46	84.60	166.49	106.15	667.22	637.84	1036.20	325.55	132.77	111.22
15	58.37	64.28	86.46	84.60	111.25	164.08	158.43	595.93	734.73	324.28	123.77	108.22
16	58.54	64.28	83.46	87.60	112.03	214.05	456.84	666.43	1026.47	346.55	125.87	108.22
17	59.54	65.28	94.46	84.60	126.73	419.70	640.92	637.56	838.97	296.28	121.87	105.22
18	57.54	62.28	94.46	98.60	196.88	278.32	634.03	516.61	800.34	248.11	121.87	109.87
19	58.54	67.28	92.46	84.60	277.45	290.48	726.43	583.84	844.34	236.65	125.89	102.87
20	60.54	69.37	91.46	81.55	214.73	328.32	687.72	637.13	668.34	190.65	125.89	103.87
21	59.54	68.37	96.46	81.55	234.90	620.81	758.56	752.59	904.48	201.27	125.91	95.87
22	60.54	67.37	90.37	77.55	207.13	405.84	541.63	780.97	576.92	223.78	123.91	101.45
23	60.54	67.37	81.46	77.37	132.90	753.74	904.63	682.61	766.34	226.65	121.91	98.87
24	58.71	68.37	85.46	76.15	224.09	492.67	311.63	554.43	1152.34	209.65	118.93	97.45
25	61.71	67.37	83.55	86.37	171.87	271.18	889.54	643.13	1806.48	210.27	120.93	101.45
26	58.71	72.37	84.55	96.28	147.58	494.37	736.61	531.03	919.96	193.32	113.93	97.22
27	62.71	69.37	87.55	125.19	150.88	613.32	804.72	460.34	710.34	190.83	115.91	97.87
28	61.71	68.37	87.55	156.37	157.73	630.36	605.52	498.72	601.29	186.29	115.91	96.45
29	59.71		88.55	127.31	196.09	196.19	808.56	610.42	554.63	186.06	114.81	96.45
30	60.71		88.55	115.60	141.19	428.74	566.63	300.11	502.74	188.44	112.81	95.45
31	61.88		86.55		167.34		473.97	421.52		180.44		93.02
TOTAL	1850.21	1759.75	2629.90	2815.34	5078.99	9025.79	20649.95	17205.20	22957.40	9934.16	3900.70	3250.13
AVERAGE	59.68	62.85	84.84	93.84	163.84	300.86	666.13	555.01	765.25	320.46	130.02	104.84
MAXIMUM	63.16	72.37	96.46	156.37	354.90	753.74	1879.34	780.97	1806.48	785.14	170.74	112.56
MINIMUM	57.37	57.88	67.37	76.15	111.25	20.96	158.43	300.11	348.63	180.44	112.81	93.02

MAX-	DATE (830703)	1879.34
35-	DATE (830823)	682.61
95-	DATE (830806)	432.02
185-	DATE (830429)	127.31
275-	DATE (830406)	87.55
355-	DATE (830208)	58.05
MIN-	DATE (830605)	20.96

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
101057.52	276.87	1879.34	20.96

Discharge at Dam Site (1984)

1984

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	92.02	89.57	107.28	113.96	215.60	203.40	563.00	848.57	815.92	256.62	133.34	96.41
2	93.52	93.57	116.69	112.68	118.46	216.38	402.63	1076.22	701.48	240.15	127.79	99.86
3	91.52	92.57	112.80	120.46	107.01	219.37	374.12	973.72	571.63	226.64	129.65	96.93
4	93.52	90.05	110.80	113.04	0.0	239.22	482.15	750.25	868.89	215.92	128.31	101.32
5	96.01	92.10	108.69	109.34	67.83	270.91	478.05	514.03	804.46	208.46	124.06	98.39
6	95.01	92.10	111.69	109.55	98.76	287.42	613.16	472.21	888.62	224.31	122.65	97.46
7	94.47	88.10	113.69	104.44	66.33	302.55	623.65	456.37	883.83	205.51	118.72	94.63
8	97.47	90.10	111.69	102.28	16.21	435.17	829.57	440.51	728.50	200.18	116.65	93.28
9	95.47	92.11	111.69	101.46	166.47	303.35	842.64	422.94	620.00	209.39	122.28	93.28
10	96.47	91.11	115.69	102.78	85.86	748.28	789.95	405.67	705.03	288.90	116.53	95.18
11	92.47	90.11	119.69	94.80	92.59	703.22	690.71	403.79	508.40	378.38	109.09	96.56
12	94.47	95.11	123.58	100.71	93.22	601.90	697.58	423.65	597.14	462.13	107.25	93.85
13	96.88	96.43	113.58	101.97	106.56	682.32	777.30	503.12	639.61	315.01	103.70	96.56
14	96.88	96.61	113.98	107.34	102.89	504.15	1064.36	454.71	559.49	284.46	109.74	96.51
15	87.90	94.61	110.39	108.22	128.21	485.05	740.80	464.61	642.58	566.64	111.44	95.64
16	95.90	96.61	121.39	111.43	251.51	414.70	601.96	560.42	711.34	313.66	108.54	91.67
17	86.51	98.05	125.23	0.0	182.06	299.77	853.36	522.90	694.61	264.89	105.78	90.38
18	89.11	93.05	126.23	95.14	179.80	369.79	709.84	533.52	754.99	271.96	112.67	95.64
19	91.25	93.50	126.23	75.23	151.95	427.29	705.90	690.67	841.26	244.60	111.42	95.64
20	90.25	96.11	114.23	107.50	168.95	424.11	514.04	596.94	738.77	229.54	102.85	94.31
21	89.34	94.12	107.08	105.42	128.06	574.71	476.50	731.35	615.49	106.98	98.56	97.41
22	86.34	91.05	110.45	98.86	124.52	630.26	755.48	560.64	477.47	162.60	97.00	96.08
23	85.90	91.50	116.45	98.89	121.38	431.05	646.04	477.23	425.06	168.91	95.42	99.15
24	86.43	90.47	112.45	102.43	132.60	515.92	825.19	485.32	414.08	166.15	94.47	97.82
25	88.43	89.47	115.45	108.48	108.17	523.96	790.19	622.63	381.76	167.97	92.98	95.23
26	87.43	89.40	117.45	31.62	207.36	497.61	950.98	660.67	350.66	148.59	92.98	89.48
27	84.95	91.40	116.68	105.61	180.78	402.52	1244.92	736.35	305.37	143.51	92.15	88.38
28	88.04	97.40	120.08	89.65	162.83	381.68	1098.12	850.32	292.62	148.44	95.79	88.38
29	90.57	103.28	122.21	105.92	359.26	359.01	1041.99	800.15	281.65	142.05	97.32	87.22
30	90.57		129.58	68.71	235.78	382.49	841.67	874.87	268.62	133.96	94.92	89.59
31	92.57		125.34		176.52		931.56	799.33		129.47		89.59
TOTAL	2837.67	2699.66	3608.46	2907.92	4337.53	12836.56	22957.41	19113.68	18089.33	7225.98	3275.05	2931.81
AVERAGE	91.54	93.09	116.40	96.93	139.92	427.89	740.56	616.57	602.98	233.10	109.17	94.57
MAXIMUM	97.47	103.28	129.58	120.46	359.26	748.28	1244.92	1076.22	888.62	566.64	133.34	101.32
MINIMUM	84.95	88.10	107.08	0.0	0.0	203.40	374.12	403.79	268.62	106.98	92.15	87.22

MAX-	DATE < 840727 >	1244.92
25-	DATE < 840821 >	731.35
95-	DATE < 840923 >	425.06
185-	DATE < 840523 >	121.38
275-	DATE < 840213 >	96.43
355-	DATE < 840122 >	86.34
MIN-	DATE < 840504 >	0.0

ANNUAL

TOTAL	AVERAGE	MAXIMUM	MINIMUM
102821.06	280.93	1244.92	0.0

Discharge at Dam Site (1985)

1985

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	90.76	92.86	117.50	106.61	105.20	352.31	584.75	481.69	802.78	268.93	152.38	93.07
2	91.17	93.91	121.83	106.20	59.53	542.70	520.18	578.24	826.14	264.05	149.89	96.22
3	92.34	89.81	120.37	108.63	118.62	347.44	447.50	600.96	1114.36	246.68	144.94	92.77
4	90.01	92.10	109.22	115.23	106.25	635.59	662.12	191.38	1128.14	239.73	140.07	89.40
5	90.01	94.19	120.55	106.20	114.47	328.72	577.22	145.84	1276.09	206.01	132.89	89.40
6	88.88	94.19	120.55	109.87	124.57	271.81	673.87	107.18	969.46	206.68	162.54	90.84
7	90.01	94.76	123.50	112.40	111.74	352.23	715.70	34.94	708.03	187.57	135.26	92.15
8	90.45	95.07	114.79	96.26	105.18	282.07	817.03	65.52	559.29	172.12	125.86	92.15
9	88.22	92.05	118.79	115.64	110.24	541.26	764.22	135.03	470.03	175.17	136.03	90.52
10	88.22	90.25	120.21	159.19	114.33	463.71	797.30	241.98	463.70	287.12	76.68	91.81
11	89.33	92.67	124.59	148.04	99.38	324.07	563.40	259.51	520.51	245.02	95.89	90.22
12	89.76	95.12	121.66	130.49	124.31	286.82	615.16	389.34	449.79	197.98	57.83	87.08
13	88.68	95.26	121.66	127.52	62.31	272.96	721.44	358.40	450.68	225.26	82.29	88.48
14	90.86	89.39	115.90	132.73	159.07	255.25	936.17	458.69	605.00	228.01	93.31	88.23
15	91.94	87.69	111.88	118.39	123.91	343.43	1034.23	312.07	493.31	196.23	101.20	89.74
16	88.74	89.81	108.01	114.42	119.48	455.98	848.39	508.43	531.96	203.63	100.88	92.81
17	86.69	84.64	103.00	110.60	116.58	814.90	874.54	398.37	519.51	664.39	102.69	89.74
18	88.10	87.69	103.00	109.36	58.77	946.30	688.84	553.53	522.70	1009.20	94.65	88.23
19	89.11	92.00	97.31	67.36	84.74	554.06	666.83	1105.25	637.46	363.07	94.40	85.26
20	88.10	100.19	97.16	103.07	97.44	481.18	692.83	747.42	560.89	273.26	94.23	90.98
21	88.10	95.41	97.16	109.54	0.0	468.02	630.11	714.18	429.87	255.17	92.33	86.55
22	90.12	93.45	102.76	100.33	26.07	547.06	651.94	988.92	385.78	210.96	97.70	83.68
23	89.11	109.33	106.32	145.23	113.88	423.46	709.78	1150.36	436.03	191.06	95.80	84.82
24	89.11	109.33	100.47	150.53	100.18	561.21	622.10	1081.74	394.47	180.97	95.89	83.43
25	89.11	105.43	101.83	133.05	113.88	484.95	613.29	1204.48	500.45	177.03	97.43	83.28
26	88.47	105.43	95.70	117.92	344.58	487.87	691.28	748.42	485.03	182.08	95.57	80.61
27	88.48	101.72	98.97	101.74	234.66	683.87	1031.21	705.07	409.21	180.69	97.19	18.80
28	87.49	105.43	87.09	102.94	539.56	689.28	1074.02	691.93	377.17	176.89	93.54	60.13
29	88.48		85.38	106.76	213.36	509.85	737.32	686.55	383.16	172.89	93.26	65.56
30	89.48		101.74	101.43	261.66	661.77	620.09	768.79	306.55	159.64	93.07	78.15
31	89.49		121.66		366.99		519.56	761.67		153.39		75.35
TOTAL	2768.82	2669.13	3390.56	3467.68	4430.94	14370.13	22102.42	17165.87	17717.55	7900.69	3235.59	2609.46
AVERAGE	89.32	95.33	109.37	115.59	142.93	479.00	712.98	553.74	590.59	254.86	107.85	84.18
MAXIMUM	92.34	109.33	124.59	159.19	539.56	946.30	1074.02	1204.48	1276.09	1009.20	162.54	96.22
MINIMUM	86.69	84.64	85.38	67.36	0.0	255.25	447.50	34.94	306.55	153.39	67.83	18.80

MAX-	DATE < 850905 >	1276.09
35-	DATE < 850720 >	692.83
95-	DATE < 850921 >	429.87
185-	DATE < 850306 >	120.55
275-	DATE < 851114 >	93.31
355-	DATE < 850410 >	67.36
MIN-	DATE < 850521 >	0.0

ANNUAL			
TOTAL	AVERAGE	MAXIMUM	MINIMUM
101828.84	278.98	1276.09	0.0

Monthly Rainfall Data at Namche Bazar(21201)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1949	12.2	43.9	14.0	22.9	28.4	144.5	227.4	160.7	170.6	124.2	0.0	5.8	954.6
1950	20.0	15.2	40.6	27.4	18.4	224.7	210.3	241.8	116.8	2.3	4.8	6.8	929.1
1951	13.9	19.6	7.6	0.0	24.8	0.0	175.9	192.2	142.1	138.6	57.8	62.6	835.1
1952	58.3	29.2	52.0	20.8	46.6	68.4	113.7	71.5	143.2	0.0	0.0	0.0	603.7
1953	273.4	12.7	4.9	3.2	150.9	272.1	253.2	171.2	162.7	83.3	68.2	255.0	1710.8
1954	7.3	4.3	9.7	0.0	0.0	173.2	190.6	0.0	165.3	5.8	0.0	0.0	556.2
1955	6.1	0.0	33.0	12.7	22.1	0.0	0.0	218.3	79.4	14.0	12.5	30.8	428.9
1956													
1957	0.0	0.0	0.0	0.0	0.0	93.8	250.3	239.8	60.5	14.4	0.0	24.2	683.0
1958	40.2	5.9	26.2	13.7	2.3	38.0	244.4	254.6	93.1	50.5	0.0	0.0	768.9
1959	135.3	2.6	42.1	36.9	41.7	99.7	263.7	201.4	170.7	103.9	0.0	0.0	1098.0
1960	0.0	8.1	48.2	109.5	91.7	110.0	241.8	239.9	218.9	35.8	0.0	0.0	1103.9
1961	20.3	31.3	20.0	22.7	23.2	151.0	123.0	243.5	152.3	84.4	21.6	32.0	925.3
1962	85.0	119.0	42.1	30.6	21.4	142.4	135.6	242.3	140.3	14.7	0.0	6.3	979.7
1963	14.3	13.0	80.6	28.6	78.2	144.0	289.8	219.6	200.2	79.4	25.2	1.4	1174.3
1964	0.0	8.8	7.0	17.2	58.0	145.0	264.7	185.8	238.4	9.0	0.0	0.0	933.9
1965	1.0	15.6	44.2	36.8	26.5	88.2	179.8	190.1	135.6	61.2	1.4	0.0	780.4
1966	98.0	31.8	0.0	10.2	13.3	119.1	251.4	219.6	124.6	12.6	5.2	4.4	890.2
1967	0.0	2.4	52.4	21.8	3.4	94.2	201.6	228.0	87.0	8.8	15.8	6.0	721.4
1968	38.6	12.2	40.0	48.4	2.6	136.2	268.8	207.0	101.6	228.8	0.0	0.0	1084.2
1969	36.0	6.0	33.5	25.2	177.3	178.9	276.4	286.8	145.6	35.7	20.6	0.0	1222.0
1970	0.0	0.0	12.0	18.0	24.8	244.5	294.9	241.5	98.7	17.2	0.0	0.0	951.6
1971	9.2	8.2	18.0	81.8	62.1	239.6	269.6	247.2	151.0	172.6	2.0	0.0	1261.3
1972	17.3	20.3	29.8	29.8	34.6	132.0	269.8	270.8	213.4	170.0	31.4	0.0	1219.2
1973	8.8	31.2	49.4	4.8	54.4	176.2	196.7	252.0	226.7	229.2	8.2	0.0	1237.6
1974	8.2	2.0	18.0	7.6	36.8	84.6	272.2	274.9	137.0	48.6	0.0	20.0	909.9
1975	20.6	19.0	32.4	9.9	7.4	196.3	412.4	262.5	311.5	33.9	0.0	2.4	1308.3
1976	15.6	0.0	0.0	26.9	51.0	309.3	257.7	300.0	143.8	0.0	0.0	0.0	1104.3
1977	7.0	0.0	18.6	60.7	164.1	117.8	356.4	394.1	185.3	72.5	18.9	18.6	1414.0
1978	22.8	29.8	119.8	24.8	2.4	109.4	165.4	210.2	149.5	163.0	6.4	14.6	1018.1
1979	7.0	18.2	8.9	18.8	23.0	93.8	138.6	128.8	0.0	0.0	0.0	0.0	437.1
1980	0.0	22.6	18.2	0.0	7.6	98.2	266.6	263.5	69.2	8.5	0.0	12.8	767.2
Ave.	31.5	17.2	29.8	24.9	41.9	136.3	227.8	221.3	146.3	65.3	9.7	16.2	968.1

Monthly Rainfall Data at Chanrikhark(21202)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1949	0.0	0.0	6.9	97.5	260.4	398.4	596.4	572.0	470.0	111.7	0.3	7.9	2521.5
1950	11.4	16.6	25.9	14.0	110.6	402.1	454.0	580.3	292.0	6.7	0.0	1.5	1915.1
1951	0.0	0.0	49.5	12.8	68.1	348.2	552.1	486.7	225.2	46.9	19.5	0.0	1809.0
1952													
1953	0.0	0.0	0.0	46.4	89.4	223.9	772.8	482.1	278.0	42.7	0.0	3.0	1938.3
1954	0.0	4.9	36.0	16.3	94.6	469.6	583.1	606.6	343.4	13.4	0.0	0.0	2167.9
1955	0.0	0.0	17.9	36.5	53.2	393.0	579.6	644.5	328.8	158.0	0.0	16.3	2227.8
1956	9.4	0.0	5.0	48.7	88.2	443.5	241.9	357.8	297.7	126.6	43.2	8.9	1670.9
1957	5.1	33.0	33.8	0.0	0.0	220.2	994.7	710.9	220.2	118.1	0.0	35.0	2371.0
1958	1.8	25.4	23.6	44.2	0.0	100.1	950.7	645.2	231.6	52.6	8.4	0.0	2083.6
1959	30.2	6.1	33.4	76.9	95.4	254.6	568.6	400.4	247.9	126.2	0.0	0.0	1839.7
1960	0.0	2.5	46.6	176.2	380.7	844.6	589.4	1223.2	1070.0	141.2	0.0	0.0	4474.4
1961	1.3	12.4	66.0	29.2	76.6	308.8	469.2	812.3	304.9	79.5	37.2	29.5	2226.9
1962	50.7	50.0	46.4	40.9	111.1	337.8	697.7	518.0	391.2	37.6	0.0	0.0	2281.4
1963	63.4	0.0	64.8	39.5	82.2	342.4	606.2	756.2	277.6	51.8	37.6	0.0	2321.7
1964	0.0	23.4	40.6	81.4	83.1	168.0	682.4	497.4	434.2	40.0	0.0	0.0	2050.5
1965	10.0	11.6	77.4	28.0	72.8	207.0	496.0	484.2	197.0	70.0	79.9	0.0	1733.9
1966	82.0	7.0	0.0	16.4	92.2	168.0	526.8	525.6	368.6	59.8	5.0	6.8	1858.2
1967	0.0	9.0	122.4	45.2	44.6	240.5	410.4	502.4	256.4	18.8	29.8	8.2	1687.7
1968	0.0	7.0	62.2	42.6	53.0	354.1	638.8	514.2	360.3	183.8	1.6	0.0	2217.6
1969	2.2	1.0	64.2	11.2	48.0	272.4	514.2	514.2	293.8	5.6	10.8	0.0	1737.6
1970	7.0	47.8	62.2	15.6	50.0	331.0	533.7	546.2	296.0	34.2	11.4	0.0	1935.1
1971	9.4	18.8	284.8	118.5	180.4	519.4	620.0	689.6	309.4	149.6	27.0	7.8	2934.7
1972													
1973	5.8	102.6	61.2	35.4	142.1	350.6	385.5	455.6	335.0	112.0	0.0	0.0	1985.8
1974	6.4	3.4	26.4	49.0	178.6	258.6	553.4	471.0	322.2	144.4	2.4	20.4	2036.2
1975	33.4	13.4	11.2	58.2	79.2	290.8	640.0	498.8	428.6	56.0	0.2	8.6	2118.4
1976	24.5	19.0	2.0	49.6	109.6	449.1	416.8	670.9	246.6	108.0	2.0	0.0	2098.1
1977	14.2	4.2	6.2	97.3	81.2	224.9	663.8	683.2	238.5	128.4	27.6	50.0	2219.5
1978	18.0	54.0	32.0	36.0	204.4	199.9	479.0	404.8	245.3	84.0	4.0	8.0	1769.4
1979	0.0	29.3	2.2	51.1	53.3	267.5	651.1	274.0	208.4	187.5	62.5	31.7	1818.6
1980	55.1	34.0	33.1	32.8	112.5	279.6	910.7	693.3	365.0	33.8	39.9	30.2	2620.0
Ave.	14.7	17.9	44.8	48.2	103.2	322.3	592.6	574.1	329.5	84.3	15.0	9.1	2155.7

Monthly Rainfall Data at Num(21301)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1960	0.0	27.0	75.5	113.2	508.2	1089.7	912.2	1399.9	1515.1	637.9	55.9	12.5	6347.1
1961	198.2	25.7	163.7	127.0	540.4	609.4	671.9	584.5	653.8	288.4	67.0	85.0	4015.0
1962	110.8	175.5	210.5	119.6	332.5	731.6	318.0	498.1	58.0	128.2	48.8	5.9	2737.5
1963	0.0	3.5	28.4	96.5	93.9	146.1	208.1	349.2	139.0	91.2	41.1	29.3	1226.3
1964	0.0	0.0	0.0	212.0	233.8	403.3	721.3	690.7	352.3	406.8	102.5	54.7	3177.4
1965	98.5	61.2	48.2	264.2	442.8	547.3	661.6	639.0	792.8	86.4	156.4	51.1	3849.5
1966	81.6	16.1	0.0	85.4	427.0	985.8	734.1	908.8	745.5	231.5	28.4	0.0	4244.2
1967	0.0	0.0	210.8	131.7	577.3	681.4	466.3	593.4	505.6	189.0	221.3	84.6	3661.4
1968	39.0	15.3	103.3	85.8	624.8	614.9	897.2	633.4	931.4	311.0	96.0	0.0	4352.1
1969	0.0	0.0	120.0	150.4	179.8	526.7	573.4	232.5	71.1	4.3	14.8	11.6	1884.6
1970	78.2	10.8	163.0	113.0	78.2	196.3	144.2	185.5	366.7	113.0	0.0	0.0	1448.9
1971	0.0	21.4	158.4	700.3	559.6	651.3	313.2	297.2	45.4	29.7	11.2	0.0	2787.7
1972	0.0	1.3	9.1	254.5	698.4	648.2	457.5	144.6	118.1	160.1	106.0	23.6	2621.4
1973	0.0	124.1	53.0	90.9	579.9	1016.9	515.7	574.3	462.0	153.0	37.7	9.0	3616.5
1974	0.0	10.4	94.8	492.2	904.4	995.6	792.1	777.3	436.5	702.0	0.0	43.4	5248.7
1975	42.2	96.7	12.4	135.8	471.5	938.7	722.9	617.0	820.4	555.7	0.0	16.0	4429.3
1976	26.4	71.6	39.4	81.2	742.7	1401.0	908.7	549.8	345.2	356.4	70.4	4.0	4596.8
1977	0.0	110.2	79.0	732.2	561.9	738.2	1081.0	1039.3	397.1	386.0	200.9	30.7	5356.5
1978	5.0	0.0	73.1	232.9	548.6	1019.1	722.5	811.3	580.7	105.3	150.5	0.0	4249.0
1979	0.0	42.5	0.0	366.1	636.1	566.9	966.1	618.5	1044.1	1484.5	39.0	46.5	5810.3
1980	0.0	87.3	183.7	201.7	618.0	893.2	1054.3	815.5	883.2	180.9	0.0	0.0	4917.8
1981	72.0	0.0	61.2	403.7	301.3	580.8	848.2	770.5	598.7	0.0	30.5	0.0	3666.9
1982	0.0	102.0	79.5	218.4	431.7	903.7	743.0	113.0	117.1	101.0	78.3	13.5	2901.2
1983	22.5	41.5	31.0	185.5	289.0	915.4	696.0	409.5	470.6	0.0	0.0	6.5	3067.5
Ave.	32.3	43.5	83.3	233.1	474.2	741.7	672.1	593.9	518.8	279.3	64.9	22.0	3758.9

Monthly Rainfall Data at Chainpur(21303)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1948	0.0	0.0	0.0	79.4	277.2	236.1	243.7	163.3	197.3	136.5	26.7	0.0	1360.2
1949	5.6	38.9	10.2	232.5	146.0	318.0	756.3	894.9	286.4	62.6	0.0	6.6	2758.0
1950	14.0	5.6	23.2	5.9	93.0	225.0	455.0	584.3	61.8	1.8	0.0	2.0	1471.6
1951	6.9	6.1	40.4	34.5	83.7	167.8	233.1	241.7	68.5	14.0	26.5	0.0	923.2
1952	0.0	53.7	12.8	55.3	387.9	229.1	360.9	335.8	411.8	14.4	15.2	0.0	1876.9
1953	24.2	7.6	78.2	61.0	300.4	110.5	384.7	224.8	119.5	2.5	0.0	0.0	1313.4
1954	0.0	14.0	3.8	3.8	129.2	133.8	262.3	190.2	181.6	0.0	0.0	0.0	918.7
1955	1.0	0.0	26.2	61.1	129.5	305.0	281.8	266.5	121.0	92.6	0.0	8.2	1292.9
1956	0.0	0.0	14.5	161.8	79.8	201.8	197.3	217.7	125.8	54.0	0.0	7.6	1060.3
1957	53.3	3.8	20.1	0.0	41.1	146.4	279.8	180.6	41.4	23.3	0.0	19.0	808.8
1958	32.5	1.3	12.0	81.5	84.2	95.0	186.7	340.1	137.8	84.6	0.0	2.3	1058.0
1959	2.5	0.5	13.8	88.6	135.4	85.8	300.2	252.6	170.6	153.2	0.0	0.0	1203.2
1960	0.0	9.8	58.0	152.2	83.4	186.5	127.8	237.2	235.6	76.0	0.0	0.0	1166.5
1961	2.0	5.0	1.8	30.6	171.6	164.8	257.4	228.8	308.8	63.4	0.6	5.4	1240.2
1962	32.0	38.2	44.2	45.6	125.0	242.2	261.8	283.6	227.0	8.4	0.0	3.4	1311.4
1963	1.0	0.0	31.8	35.8	194.4	223.2	276.6	153.0	218.8	60.8	21.6	1.4	1218.4
1964	0.0	0.0	3.2	198.8	127.6	214.0	412.6	251.9	237.8	47.4	0.0	0.0	1493.3
1965	0.0	11.8	23.2	28.3	151.0	442.8	255.2	285.2	71.0	32.4	140.8	0.0	1441.7
1966	59.4	20.6	0.0	29.4	158.8	137.7	303.4	539.6	134.0	85.9	2.4	1.5	1472.7
1967	0.0	0.0	47.2	56.1	100.6	54.4	325.4	357.5	214.4	16.0	2.0	0.0	1173.6
1968	6.8	0.0	9.7	12.4	175.4	247.8	293.1	276.1	345.2	247.7	0.0	0.0	1614.2
1969	0.3	5.0	10.4	26.5	229.6	137.1	472.0	271.2	134.1	67.7	0.7	0.0	1354.6
1970	8.7	40.3	5.2	58.3	68.2	211.4	383.5	246.6	87.0	33.0	0.0	0.0	1142.2
1971	0.0	2.0	12.8	184.3	347.7	218.9	417.3	348.2	199.9	104.6	39.9	2.0	1877.6
1972	1.2	12.4	24.5	84.0	312.4	140.4	188.9	144.1	184.6	33.8	140.0	0.0	1266.3
1973	146.0	45.6	66.9	34.4	172.0	344.4	358.8	175.0	210.3	233.8	9.6	0.0	1796.8
1974	13.7	9.7	23.1	217.9	90.6	175.8	365.3	230.5	212.4	57.6	0.0	6.8	1403.4
1975	19.0	0.0	2.0	92.8	219.1	330.0	487.0	65.7	313.2	66.6	0.0	0.0	1595.4
1976	24.2	14.2	0.0	59.8	163.4	232.6	310.8	274.6	122.0	13.4	5.4	0.0	1220.4
1977	5.0	6.2	50.2	135.0	158.4	130.4	85.6	169.8	117.2	46.2	19.0	26.6	949.6
1978	16.8	2.4	57.6	101.8	130.4	289.0	336.4	245.7	176.1	89.9	20.8	7.2	1474.1
1979	8.0	16.6	0.0	94.8	128.0	240.5	203.8	398.3	150.1	38.7	28.8	33.5	1341.1
1980	0.0	18.2	46.9	63.9	336.2	440.7	295.5	229.2	241.8	79.9	5.7	0.6	1758.6
1981	22.7	0.0	49.9	80.6	317.3	252.6	348.6	201.5	156.1	3.5	5.5	0.6	1438.9
1982	0.0	20.3	22.6	92.3	90.6	159.4	159.0	204.3	105.4	50.9	48.3	0.0	953.1
1983	14.3	27.9	13.5	62.6	103.9	268.2	485.3	348.8	189.1	71.9	0.0	14.9	1600.4
Ave.	14.5	12.2	23.9	79.0	167.9	215.0	315.4	279.4	181.0	63.0	15.5	4.2	1370.8

Monthly Rainfall Data at Chepuwa(21317)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1960	0.0	72.2	190.8	152.2	135.9	506.8	523.6	544.0	317.0	107.2	10.8	0.0	2560.5
1961	46.4	65.8	175.2	115.4	248.8	285.8	252.7	267.9	384.7	153.4	30.5	31.0	2057.6
1962	60.4	73.2	191.0	74.4	309.4	382.1	457.0	655.6	351.4	65.4	12.4	10.6	2642.9
1963	34.7	24.4	144.0	185.6	263.3	541.4	662.8	583.8	435.8	196.0	61.9	15.6	3149.3
1964	0.0	0.0	0.0	204.0	183.5	297.6	491.8	380.1	350.8	95.2	36.8	0.4	2040.2
1965	4.4	104.4	128.4	134.6	169.5	316.0	401.2	367.6	348.2	106.9	115.3	0.0	2196.5
1966	136.4	73.2	26.2	42.2	158.4	289.0	578.6	499.2	388.8	188.6	11.4	31.0	2423.0
1967	2.9	45.0	153.5	108.4	259.3	465.2	367.2	398.1	293.1	145.2	88.0	6.8	2332.7
1968	55.2	64.6	170.5	64.9	173.5	446.0	623.4	424.6	319.4	222.9	31.5	0.0	2596.5
1969	22.3	12.4	172.0	107.3	255.0	410.2	581.9	333.3	262.6	85.1	10.8	0.0	2252.9
1970	28.0	97.6	108.4	93.6	209.4	487.3	444.0	466.4	365.3	43.8	0.0	0.0	2343.8
1971													
1972													
1973													
1974	22.0	14.6	130.8	171.6	376.0	453.4	657.8	382.0	409.0	237.6	75.0	8.0	2937.8
1975	86.2	98.4	23.8	81.8	154.8	597.0	407.2	352.0	373.0	241.9	10.8	0.0	2426.9
1976	5.1	70.8	53.4	145.4	360.7	470.8	406.2	485.2	298.2	106.2	75.0	7.1	2484.1
1977	2.2	16.6	198.0	328.0	282.0	470.8	636.7	535.1	303.6	285.3	148.0	98.5	3304.8
1978	152.4	76.2	208.0	116.9	283.6	486.8	447.2	502.0	340.6	82.6	65.6	18.6	2780.5
1979	22.3	27.0	66.6	113.7	247.9	247.8	592.2	315.1	296.3	257.4	64.1	47.2	2297.6
1980	23.8	223.0	205.9	150.5	153.0	390.5	623.4	516.9	344.3	107.0	32.0	1.4	2771.7
1981	136.2	36.9	120.0	217.9	213.2	247.2	477.7	517.3	330.6	69.0	48.1	0.0	2414.1
1982	2.3	127.6	192.1	184.9	232.2	450.0	530.1	352.2	250.9	85.3	76.5	21.7	2505.8
1983	68.1	123.1	78.9	159.6	277.6	453.0	560.8	420.8	525.9	143.0	16.0	26.3	2853.1
Ave.	43.4	68.9	130.4	140.6	235.6	414.0	510.6	442.8	347.1	144.0	48.6	15.4	2541.5

Monthly Rainfall Data at Dingla(21325)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1957	90.2	14.1	17.3	23.8	72.9	276.0	467.4	442.1	429.0	138.4	0.0	18.3	1989.5
1958	32.3	0.0	6.3	49.4	104.4	149.6	352.6	660.9	275.5	115.3	0.0	7.6	1753.9
1959	43.2	11.4	26.7	129.0	190.0	262.0	315.0	894.2	705.9	294.1	0.0	0.0	2871.5
1960	0.0	8.4	64.4	23.6	191.4	200.8	257.5	317.5	319.7	94.5	0.0	0.0	1477.8
1961	0.0	26.5	12.9	22.0	194.3	290.2	331.9	510.4	294.2	94.2	0.0	0.0	1776.6
1962	25.5	61.6	30.8	40.5	164.7	465.6	267.6	514.0	225.4	38.5	0.0	0.0	1834.2
1963	14.0	0.0	24.8	35.2	102.1	364.0	377.8	470.9	179.1	101.1	38.5	0.0	1707.5
1964	0.0	0.0	0.0	114.2	91.4	198.6	658.1	249.8	426.3	82.2	0.0	0.0	1820.6
1965	0.0	40.8	55.1	35.2	158.4	372.3	325.7	478.5	296.4	98.8	31.2	0.0	1892.4
1966	39.0	0.0	0.0	36.9	87.2	156.9	335.8	480.2	294.6	32.2	0.0	9.9	1472.7
1967	0.0	0.0	64.3	76.0	96.2	156.1	346.2	264.2	286.9	29.6	9.6	0.0	1329.1
1968	6.1	0.0	8.9	9.4	158.6	260.2	323.0	332.2	603.7	255.8	0.0	0.0	1957.9
1969	0.0	0.0	39.9	18.3	123.4	61.3	330.8	293.9	188.9	61.3	0.0	0.0	1117.8
1970	5.4	39.7	10.4	74.5	9.4	408.8	610.9	213.2	385.2	35.0	14.2	0.0	1806.7
1971	0.0	0.0	34.7	98.0	213.4	390.1	298.4	369.0	324.0	152.4	34.0	0.0	1914.0
1972	6.0	6.7	51.0	285.0	322.5	223.7	242.9	120.5	267.4	68.6	18.2	0.0	1612.5
1973	0.0	18.4	37.0	62.2	253.7	425.5	369.4	396.8	258.9	206.7	12.4	0.0	2041.0
1974	17.6	0.0	30.3	171.6	172.8	442.0	554.6	716.6	209.3	221.6	0.0	6.0	2542.4
1975	19.1	29.5	0.0	41.0	176.7	347.6	513.4	151.1	583.4	148.1	0.0	2.4	2012.3
1976	29.6	7.2	0.0	65.7	254.1	360.2	455.5	333.3	50.3	2.1	0.0	0.0	1558.0
1977	0.0	0.0	43.6	86.5	170.4	160.4	386.6	476.3	330.3	22.7	28.0	47.9	1752.7
1978	6.9	2.1	73.6	79.0	243.0	308.1	467.6	303.6	316.8	78.5	11.5	9.6	1900.3
1979	0.0	26.2	0.0	108.2	154.8	487.4	338.1	438.1	433.3	162.6	13.5	55.6	2217.8
1980	0.0	7.1	50.3	47.6	229.1	223.6	265.6	330.8	497.0	124.0	19.0	0.0	1794.1
1981	30.1	0.0	50.2	88.8	263.9	254.8	550.4	455.1	273.0	27.8	13.9	0.0	2008.0
1982	0.0	20.3	25.4	104.0	113.7	474.2	302.0	188.3	313.4	138.0	44.9	0.0	1724.2
1983	17.0	4.8	21.9	74.5	234.7	309.2	603.1	292.1	358.0	62.0	0.0	16.6	1993.9
Ave.	14.1	12.0	28.9	74.1	168.4	297.4	394.4	396.1	338.0	106.9	10.7	6.4	1847.4

C. OPTIMIZATION STUDY DATA

C. OPTIMIZATION STUDY DATA

Power/Energy Demand & Sales

CASE- I-60 , II-60
Pmax.= 149.4MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	870.1	0.0	870.1	99.6	179.0	691.1	52.0
1995	1384.0	256.0	310.0	69.0	870.1	0.0	870.1	99.6	256.0	614.1	69.0
1996	1461.0	333.0	327.1	86.1	870.1	0.0	870.1	99.6	333.0	537.1	86.1
1997	1543.0	415.0	345.2	104.2	1303.5	0.0	1303.5	149.4	415.0	888.5	104.2
1998	1628.0	500.0	364.2	123.2	1303.5	0.0	1303.5	149.4	500.0	803.5	123.2
1999	1716.0	588.0	384.0	143.0	1303.5	0.0	1303.5	149.4	588.0	715.5	143.0
2000	1808.0	680.0	404.7	163.7	1303.5	0.0	1303.5	149.4	680.0	623.5	149.4
2001	1904.0	776.0	426.4	185.4	1303.5	0.0	1303.5	149.4	776.0	527.5	149.4
2002	2004.0	876.0	449.3	208.3	1303.5	0.0	1303.5	149.4	876.0	427.5	149.4
2003	2108.0	980.0	473.3	232.3	1303.5	0.0	1303.5	149.4	980.0	323.5	149.4
2004	2217.0	1089.0	498.5	257.5	1303.5	0.0	1303.5	149.4	1089.0	214.5	149.4
2005	2329.0	1201.0	524.8	283.8	1303.5	0.0	1303.5	149.4	1201.0	102.5	149.4
2006	2446.0	1318.0	552.3	311.3	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2007	2568.0	1440.0	581.1	340.1	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2008	2695.0	1567.0	611.5	370.5	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2009	2827.0	1699.0	642.5	401.5	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2010	2965.0	1837.0	675.3	434.3	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2011	3109.0	1981.0	709.4	468.4	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2012	3258.0	2130.0	745.0	504.0	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2013	3413.0	2285.0	782.1	541.1	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4
2014	3574.0	2446.0	820.7	579.7	1303.5	0.0	1303.5	149.4	1303.5	0.0	149.4

Power/Energy Demand & Sales

CASE- I -70 , II -70
Pmax.= 174.9MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1015.1	0.0	1015.1	116.6	179.0	836.1	52.0
1995	1384.0	256.0	310.0	69.0	1015.1	0.0	1015.1	116.6	256.0	759.1	69.0
1996	1461.0	333.0	327.1	86.1	1015.1	0.0	1015.1	116.6	333.0	682.1	86.1
1997	1543.0	415.0	345.2	104.2	1015.1	0.0	1015.1	116.6	415.0	600.1	104.2
1998	1628.0	500.0	364.2	123.2	1514.4	0.0	1514.4	174.9	500.0	1014.4	123.2
1999	1716.0	588.0	384.0	143.0	1514.4	0.0	1514.4	174.9	588.0	926.4	143.0
2000	1808.0	680.0	404.7	163.7	1514.4	0.0	1514.4	174.9	680.0	834.4	163.7
2001	1904.0	776.0	426.4	185.4	1514.4	0.0	1514.4	174.9	776.0	738.4	174.9
2002	2004.0	876.0	449.3	208.3	1514.4	0.0	1514.4	174.9	876.0	638.4	174.9
2003	2108.0	980.0	473.3	232.3	1514.4	0.0	1514.4	174.9	980.0	534.4	174.9
2004	2217.0	1089.0	498.5	257.5	1514.4	0.0	1514.4	174.9	1089.0	425.4	174.9
2005	2329.0	1201.0	524.8	283.8	1514.4	0.0	1514.4	174.9	1201.0	313.4	174.9
2006	2446.0	1318.0	552.3	311.3	1514.4	0.0	1514.4	174.9	1318.0	196.4	174.9
2007	2568.0	1440.0	581.1	340.1	1514.4	0.0	1514.4	174.9	1440.0	74.4	174.9
2008	2695.0	1567.0	611.5	370.5	1514.4	0.0	1514.4	174.9	1514.4	0.0	174.9
2009	2827.0	1699.0	642.5	401.5	1514.4	0.0	1514.4	174.9	1514.4	0.0	174.9
2010	2965.0	1837.0	675.3	434.3	1514.4	0.0	1514.4	174.9	1514.4	0.0	174.9
2011	3109.0	1981.0	709.4	468.4	1514.4	0.0	1514.4	174.9	1514.4	0.0	174.9
2012	3258.0	2130.0	745.0	504.0	1514.4	0.0	1514.4	174.9	1514.4	0.0	174.9
2013	3413.0	2285.0	782.1	541.1	1514.4	0.0	1514.4	149.4	1514.4	0.0	149.4
2014	3574.0	2446.0	820.7	579.7	1514.4	0.0	1514.4	149.4	1514.4	0.0	149.4

Power/Energy Demand & Sales

CASE- I -80 , II -80
Pmax.= 201.0MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1159.7	0.0	1159.7	134.0	179.0	980.7	52.0
1995	1384.0	256.0	310.0	69.0	1159.7	0.0	1159.7	134.0	256.0	903.7	69.0
1996	1461.0	333.0	327.1	86.1	1159.7	0.0	1159.7	134.0	333.0	826.7	86.1
1997	1543.0	415.0	345.2	104.2	1159.7	0.0	1159.7	134.0	415.0	744.7	104.2
1998	1628.0	500.0	364.2	123.2	1159.7	0.0	1159.7	134.0	500.0	659.7	123.2
1999	1716.0	588.0	384.0	143.0	1721.6	0.0	1721.6	201.0	588.0	1133.6	143.0
2000	1808.0	680.0	404.7	163.7	1721.6	0.0	1721.6	201.0	680.0	1041.6	163.7
2001	1904.0	776.0	426.4	185.4	1721.6	0.0	1721.6	201.0	776.0	945.6	185.4
2002	2004.0	876.0	449.3	208.3	1721.6	0.0	1721.6	201.0	876.0	845.6	201.0
2003	2108.0	980.0	473.3	232.3	1721.6	0.0	1721.6	201.0	980.0	741.6	201.0
2004	2217.0	1089.0	498.5	257.5	1721.6	0.0	1721.6	201.0	1089.0	632.6	201.0
2005	2329.0	1201.0	524.8	283.8	1721.6	0.0	1721.6	201.0	1201.0	520.6	201.0
2006	2446.0	1318.0	552.3	311.3	1721.6	0.0	1721.6	201.0	1318.0	403.6	201.0
2007	2568.0	1440.0	581.1	340.1	1721.6	0.0	1721.6	201.0	1440.0	281.6	201.0
2008	2695.0	1567.0	611.5	370.5	1721.6	0.0	1721.6	201.0	1567.0	154.6	201.0
2009	2827.0	1699.0	642.5	401.5	1721.6	0.0	1721.6	201.0	1699.0	22.6	201.0
2010	2965.0	1837.0	675.3	434.3	1721.6	0.0	1721.6	201.0	1721.6	0.0	201.0
2011	3109.0	1981.0	709.4	468.4	1721.6	0.0	1721.6	201.0	1721.6	0.0	201.0
2012	3258.0	2130.0	745.0	504.0	1721.6	0.0	1721.6	201.0	1721.6	0.0	201.0
2013	3413.0	2285.0	782.1	541.1	1721.6	0.0	1721.6	201.0	1721.6	0.0	201.0
2014	3574.0	2446.0	820.7	579.7	1721.6	0.0	1721.6	201.0	1721.6	0.0	201.0

Power/Energy Demand & Sales

CASE I -90 , II -90
Pmax.= 224.8MW N= 4

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	978.8	0.0	978.8	112.4	179.0	799.8	52.0
1995	1384.0	256.0	310.0	69.0	978.8	0.0	978.8	112.4	256.0	722.8	69.0
1996	1461.0	333.0	327.1	86.1	978.8	0.0	978.8	112.4	333.0	645.8	86.1
1997	1543.0	415.0	345.2	104.2	1462.1	0.0	1462.1	168.6	415.0	1047.1	104.2
1998	1628.0	500.0	364.2	123.2	1462.1	0.0	1462.1	168.6	500.0	962.1	123.2
1999	1716.0	588.0	384.0	143.0	1462.1	0.0	1462.1	168.6	588.0	874.1	143.0
2000	1808.0	680.0	404.7	163.7	1863.2	58.9	1922.1	224.8	680.0	1242.1	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	58.9	1922.1	224.8	776.0	1146.1	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	58.9	1922.1	224.8	876.0	1046.1	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	58.9	1922.1	224.8	980.0	942.1	224.8
2004	2217.0	1089.0	498.5	257.5	1863.2	58.9	1922.1	224.8	1089.0	833.1	224.8
2005	2329.0	1201.0	524.8	283.8	1863.2	58.9	1922.1	224.8	1201.0	721.1	224.8
2006	2446.0	1318.0	552.3	311.3	1863.2	58.9	1922.1	224.8	1318.0	604.1	224.8
2007	2568.0	1440.0	581.1	340.1	1863.2	58.9	1922.1	224.8	1440.0	482.1	224.8
2008	2695.0	1567.0	611.5	370.5	1863.2	58.9	1922.1	224.8	1567.0	355.1	224.8
2009	2827.0	1699.0	642.5	401.5	1863.2	58.9	1922.1	224.8	1699.0	223.1	224.8
2010	2965.0	1837.0	675.3	434.3	1863.2	58.9	1922.1	224.8	1837.0	85.1	224.8
2011	3109.0	1981.0	709.4	468.4	1863.2	58.9	1922.1	224.8	1863.2	58.9	224.8
2012	3258.0	2130.0	745.0	504.0	1863.2	58.9	1922.1	224.8	1863.2	58.9	224.8
2013	3413.0	2285.0	782.1	541.1	1863.2	58.9	1922.1	224.8	1863.2	58.9	224.8
2014	3574.0	2446.0	820.7	579.7	1863.2	58.9	1922.1	224.8	1863.2	58.9	224.8

Power/Energy Demand & Sales

CASE- I -100 , II -100
Pmax.= 250.4MW N= 4

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1087.5	0.0	1087.5	125.2	179.0	908.5	52.0
1995	1384.0	256.0	310.0	69.0	1087.5	0.0	1087.5	125.2	256.0	831.5	69.0
1996	1461.0	333.0	327.1	86.1	1087.5	0.0	1087.5	125.2	333.0	754.5	86.1
1997	1543.0	415.0	345.2	104.2	1087.5	0.0	1087.5	125.2	415.0	672.5	104.2
1998	1628.0	500.0	364.2	123.2	1618.5	0.0	1618.5	187.8	500.0	1118.5	123.2
1999	1716.0	588.0	384.0	143.0	1618.5	0.0	1618.5	187.8	588.0	1030.5	143.0
2000	1808.0	680.0	404.7	163.7	1618.5	0.0	1618.5	187.8	680.0	938.5	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	243.0	2106.2	250.4	776.0	1330.2	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	243.0	2106.2	250.4	876.0	1230.2	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	243.0	2106.2	250.4	980.0	1126.2	232.3
2004	2217.0	1089.0	498.5	257.5	1863.2	243.0	2106.2	250.4	1089.0	1017.2	250.4
2005	2329.0	1201.0	524.8	283.8	1863.2	243.0	2106.2	250.4	1201.0	905.2	250.4
2006	2446.0	1318.0	552.3	311.3	1863.2	243.0	2106.2	250.4	1318.0	788.2	250.4
2007	2568.0	1440.0	581.1	340.1	1863.2	243.0	2106.2	250.4	1440.0	666.2	250.4
2008	2695.0	1567.0	611.5	370.5	1863.2	243.0	2106.2	250.4	1567.0	539.2	250.4
2009	2827.0	1699.0	642.5	401.5	1863.2	243.0	2106.2	250.4	1699.0	407.2	250.4
2010	2965.0	1837.0	675.3	434.3	1863.2	243.0	2106.2	250.4	1837.0	269.2	250.4
2011	3109.0	1981.0	709.4	468.4	1863.2	243.0	2106.2	250.4	1863.2	243.0	250.4
2012	3258.0	2130.0	745.0	504.0	1863.2	243.0	2106.2	250.4	1863.2	243.0	250.4
2013	3413.0	2285.0	782.1	541.1	1863.2	243.0	2106.2	250.4	1863.2	243.0	250.4
2014	3574.0	2446.0	820.7	579.7	1863.2	243.0	2106.2	250.4	1863.2	243.0	250.4

Power/Energy Demand & Sales

CASE 1 80-830
Pmax.= 193.8MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1119.4	0.0	1119.4	129.2	179.0	940.4	52.0
1995	1384.0	256.0	310.0	69.0	1119.4	0.0	1119.4	129.2	256.0	863.4	69.0
1996	1461.0	333.0	327.1	86.1	1119.4	0.0	1119.4	129.2	333.0	786.4	86.1
1997	1543.0	415.0	345.2	104.2	1119.4	0.0	1119.4	129.2	415.0	704.4	104.2
1998	1628.0	500.0	364.2	123.2	1119.4	0.0	1119.4	129.2	500.0	619.4	123.2
1999	1716.0	588.0	384.0	143.0	1661.8	0.0	1661.8	193.8	588.0	1073.8	143.0
2000	1808.0	680.0	404.7	163.7	1661.8	0.0	1661.8	193.8	680.0	981.8	163.7
2001	1904.0	776.0	426.4	185.4	1661.8	0.0	1661.8	193.8	776.0	885.8	185.4
2002	2004.0	876.0	449.3	208.3	1661.8	0.0	1661.8	193.8	876.0	785.8	193.8
2003	2108.0	980.0	473.3	232.3	1661.8	0.0	1661.8	193.8	980.0	681.8	193.8
2004	2217.0	1089.0	498.5	257.5	1661.8	0.0	1661.8	193.8	1089.0	572.8	193.8
2005	2329.0	1201.0	524.8	283.8	1661.8	0.0	1661.8	193.8	1201.0	460.8	193.8
2006	2446.0	1318.0	552.3	311.3	1661.8	0.0	1661.8	193.8	1318.0	343.8	193.8
2007	2568.0	1440.0	581.1	340.1	1661.8	0.0	1661.8	193.8	1440.0	221.8	193.8
2008	2695.0	1567.0	611.5	370.5	1661.8	0.0	1661.8	193.8	1567.0	94.8	193.8
2009	2827.0	1699.0	642.5	401.5	1661.8	0.0	1661.8	193.8	1661.8	0.0	193.8
2010	2965.0	1837.0	675.3	434.3	1661.8	0.0	1661.8	193.8	1661.8	0.0	193.8
2011	3109.0	1981.0	709.4	468.4	1661.8	0.0	1661.8	193.8	1661.8	0.0	193.8
2012	3258.0	2130.0	745.0	504.0	1661.8	0.0	1661.8	193.8	1661.8	0.0	193.8
2013	3413.0	2285.0	782.1	541.1	1661.8	0.0	1661.8	193.8	1661.8	0.0	193.8
2014	3574.0	2446.0	820.7	579.7	1661.8	0.0	1661.8	193.8	1661.8	0.0	193.8

Power/Energy Demand & Sales

CASE- I-80-855
Pmax.= 211.2MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1220.1	0.0	1220.1	140.8	179.0	1041.1	52.0
1995	1384.0	256.0	310.0	69.0	1220.1	0.0	1220.1	140.8	256.0	964.1	69.0
1996	1461.0	333.0	327.1	86.1	1220.1	0.0	1220.1	140.8	333.0	887.1	86.1
1997	1543.0	415.0	345.2	104.2	1220.1	0.0	1220.1	140.8	415.0	805.1	104.2
1998	1628.0	500.0	364.2	123.2	1220.1	0.0	1220.1	140.8	500.0	720.1	123.2
1999	1716.0	588.0	384.0	143.0	1811.3	0.0	1811.3	211.2	588.0	1223.3	143.0
2000	1808.0	680.0	404.7	163.7	1811.3	0.0	1811.3	211.2	680.0	1131.3	163.7
2001	1904.0	776.0	426.4	185.4	1811.3	0.0	1811.3	211.2	776.0	1035.3	185.4
2002	2004.0	876.0	449.3	208.3	1811.3	0.0	1811.3	211.2	876.0	935.3	208.3
2003	2108.0	980.0	473.3	232.3	1811.3	0.0	1811.3	211.2	980.0	831.3	211.2
2004	2217.0	1089.0	498.5	257.5	1811.3	0.0	1811.3	211.2	1089.0	722.3	211.2
2005	2329.0	1201.0	524.8	283.8	1811.3	0.0	1811.3	211.2	1201.0	610.3	211.2
2006	2446.0	1318.0	552.3	311.3	1811.3	0.0	1811.3	211.2	1318.0	493.3	211.2
2007	2568.0	1440.0	581.1	340.1	1811.3	0.0	1811.3	211.2	1440.0	371.3	211.2
2008	2695.0	1567.0	611.5	370.5	1811.3	0.0	1811.3	211.2	1567.0	244.3	211.2
2009	2827.0	1699.0	642.5	401.5	1811.3	0.0	1811.3	211.2	1699.0	112.3	211.2
2010	2965.0	1837.0	675.3	434.3	1811.3	0.0	1811.3	211.2	1811.3	0.0	211.2
2011	3109.0	1981.0	709.4	468.4	1811.3	0.0	1811.3	211.2	1811.3	0.0	211.2
2012	3258.0	2130.0	745.0	504.0	1811.3	0.0	1811.3	211.2	1811.3	0.0	211.2
2013	3413.0	2285.0	782.1	541.1	1811.3	0.0	1811.3	211.2	1811.3	0.0	211.2
2014	3574.0	2446.0	820.7	579.7	1811.3	0.0	1811.3	211.2	1811.3	0.0	211.2

Power/Energy Demand & Sales

CASE: I-80-875
Pmax.= 223.6MW N= 4

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	975.8	0.0	975.8	111.8	179.0	796.8	52.0
1995	1384.0	256.0	310.0	69.0	975.8	0.0	975.8	111.8	256.0	719.8	69.0
1996	1461.0	333.0	327.1	86.1	975.8	0.0	975.8	111.8	333.0	642.8	86.1
1997	1543.0	415.0	345.2	104.2	1461.9	0.0	1461.9	167.7	415.0	1046.9	104.2
1998	1628.0	500.0	364.2	123.2	1461.9	0.0	1461.9	167.7	500.0	961.9	123.2
1999	1716.0	588.0	384.0	143.0	1461.9	0.0	1461.9	167.7	588.0	873.9	143.0
2000	1808.0	680.0	404.7	163.7	1930.8	0.0	1930.8	223.6	680.0	1250.8	163.7
2001	1904.0	776.0	426.4	185.4	1930.8	0.0	1930.8	223.6	776.0	1154.8	185.4
2002	2004.0	876.0	449.3	208.3	1930.8	0.0	1930.8	223.6	876.0	1054.8	208.3
2003	2108.0	980.0	473.3	232.3	1930.8	0.0	1930.8	223.6	980.0	950.8	223.6
2004	2217.0	1089.0	498.5	257.5	1930.8	0.0	1930.8	223.6	1089.0	841.8	223.6
2005	2329.0	1201.0	524.8	283.8	1930.8	0.0	1930.8	223.6	1201.0	729.8	223.6
2006	2446.0	1318.0	552.3	311.3	1930.8	0.0	1930.8	223.6	1318.0	612.8	223.6
2007	2568.0	1440.0	581.1	340.1	1930.8	0.0	1930.8	223.6	1440.0	490.8	223.6
2008	2695.0	1567.0	611.5	370.5	1930.8	0.0	1930.8	223.6	1567.0	363.8	223.6
2009	2827.0	1699.0	642.5	401.5	1930.8	0.0	1930.8	223.6	1699.0	231.8	223.6
2010	2965.0	1837.0	675.3	434.3	1930.8	0.0	1930.8	223.6	1837.0	93.8	223.6
2011	3109.0	1981.0	709.4	468.4	1930.8	0.0	1930.8	223.6	1930.8	0.0	223.6
2012	3258.0	2130.0	745.0	504.0	1930.8	0.0	1930.8	223.6	1930.8	0.0	223.6
2013	3413.0	2285.0	782.1	541.1	1930.8	0.0	1930.8	223.6	1930.8	0.0	223.6
2014	3574.0	2446.0	820.7	579.7	1930.8	0.0	1930.8	223.6	1930.8	0.0	223.6

Power/Energy Demand & Sales

CASE- 1-80-S
Pmax.= 149.1MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	865.8	0.0	865.8	99.4	179.0	686.8	52.0
1995	1384.0	256.0	310.0	69.0	865.8	0.0	865.8	99.4	256.0	609.8	69.0
1996	1461.0	333.0	327.1	86.1	865.8	0.0	865.8	99.4	333.0	532.8	86.1
1997	1543.0	415.0	345.2	104.2	865.8	0.0	865.8	99.4	415.0	450.8	99.4
1998	1628.0	500.0	364.2	123.2	865.8	0.0	865.8	99.4	500.0	365.8	99.4
1999	1716.0	588.0	384.0	143.0	1285.2	0.0	1285.2	149.1	588.0	697.2	143.0
2000	1808.0	680.0	404.7	163.7	1285.2	0.0	1285.2	149.1	680.0	605.2	149.1
2001	1904.0	776.0	426.4	185.4	1285.2	0.0	1285.2	149.1	776.0	509.2	149.1
2002	2004.0	876.0	449.3	208.3	1285.2	0.0	1285.2	149.1	876.0	409.2	149.1
2003	2108.0	980.0	473.3	232.3	1285.2	0.0	1285.2	149.1	980.0	305.2	149.1
2004	2217.0	1089.0	498.5	257.5	1285.2	0.0	1285.2	149.1	1089.0	196.2	149.1
2005	2329.0	1201.0	524.8	283.8	1285.2	0.0	1285.2	149.1	1201.0	84.2	149.1
2006	2446.0	1318.0	552.3	311.3	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2007	2568.0	1440.0	581.1	340.1	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2008	2695.0	1567.0	611.5	370.5	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2009	2827.0	1699.0	642.5	401.5	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2010	2965.0	1837.0	675.3	434.3	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2011	3109.0	1981.0	709.4	468.4	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2012	3258.0	2130.0	745.0	504.0	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2013	3413.0	2285.0	782.1	541.1	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1
2014	3574.0	2446.0	820.7	579.7	1285.2	0.0	1285.2	149.1	1285.2	0.0	149.1

Power/Energy Demand & Sales

CASE- I 80-K
Pmax.= 211.8MW N= 3

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1220.1	0.0	1220.1	141.2	179.0	1041.1	52.0
1995	1384.0	256.0	310.0	69.0	1220.1	0.0	1220.1	141.2	256.0	964.1	69.0
1996	1461.0	333.0	327.1	86.1	1220.1	0.0	1220.1	141.2	333.0	887.1	86.1
1997	1543.0	415.0	345.2	104.2	1220.1	0.0	1220.1	141.2	415.0	805.1	104.2
1998	1628.0	500.0	364.2	123.2	1220.1	0.0	1220.1	141.2	500.0	720.1	123.2
1999	1716.0	588.0	384.0	143.0	1811.3	0.0	1811.3	211.8	588.0	1223.3	143.0
2000	1808.0	680.0	404.7	163.7	1811.3	0.0	1811.3	211.8	680.0	1131.3	163.7
2001	1904.0	776.0	426.4	185.4	1811.3	0.0	1811.3	211.8	776.0	1035.3	185.4
2002	2004.0	876.0	449.3	208.3	1811.3	0.0	1811.3	211.8	876.0	935.3	208.3
2003	2108.0	980.0	473.3	232.3	1811.3	0.0	1811.3	211.8	980.0	831.3	211.8
2004	2217.0	1089.0	498.5	257.5	1811.3	0.0	1811.3	211.8	1089.0	722.3	211.8
2005	2329.0	1201.0	524.8	283.8	1811.3	0.0	1811.3	211.8	1201.0	610.3	211.8
2006	2446.0	1318.0	552.3	311.3	1811.3	0.0	1811.3	211.8	1318.0	493.3	211.8
2007	2568.0	1440.0	581.1	340.1	1811.3	0.0	1811.3	211.8	1440.0	371.3	211.8
2008	2695.0	1567.0	611.5	370.5	1811.3	0.0	1811.3	211.8	1567.0	244.3	211.8
2009	2827.0	1699.0	642.5	401.5	1811.3	0.0	1811.3	211.8	1699.0	112.3	211.8
2010	2965.0	1837.0	675.3	434.3	1811.3	0.0	1811.3	211.8	1811.3	0.0	211.8
2011	3109.0	1981.0	709.4	468.4	1811.3	0.0	1811.3	211.8	1811.3	0.0	211.8
2012	3258.0	2130.0	745.0	504.0	1811.3	0.0	1811.3	211.8	1811.3	0.0	211.8
2013	3413.0	2285.0	782.1	541.1	1811.3	0.0	1811.3	211.8	1811.3	0.0	211.8
2014	3574.0	2446.0	820.7	579.7	1811.3	0.0	1811.3	211.8	1811.3	0.0	211.8

Power/Energy Demand & Sales

CASE- Ⅲ-120
Pmax.= 298.8MW N= 6

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	870.1	0.0	870.1	99.6	179.0	691.1	52.0
1995	1384.0	256.0	310.0	69.0	870.1	0.0	870.1	99.6	256.0	614.1	69.0
1996	1461.0	333.0	327.1	86.1	870.1	0.0	870.1	99.6	333.0	537.1	86.1
1997	1543.0	415.0	345.2	104.2	1303.5	0.0	1303.5	149.4	415.0	888.5	104.2
1998	1628.0	500.0	364.2	123.2	1303.5	0.0	1303.5	149.4	500.0	803.5	123.2
1999	1716.0	588.0	384.0	143.0	1863.2	568.1	2431.3	298.8	588.0	1843.3	143.0
2000	1808.0	680.0	404.7	163.7	1863.2	568.1	2431.3	298.8	680.0	1751.3	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	568.1	2431.3	298.8	776.0	1655.3	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	568.1	2431.3	298.8	876.0	1555.3	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	568.1	2431.3	298.8	980.0	1451.3	232.3
2004	2217.0	1089.0	498.5	257.5	1863.2	568.1	2431.3	298.8	1089.0	1342.3	257.5
2005	2329.0	1201.0	524.8	283.8	1863.2	568.1	2431.3	298.8	1201.0	1230.3	283.8
2006	2446.0	1318.0	552.3	311.3	1863.2	568.1	2431.3	298.8	1318.0	1113.3	298.8
2007	2568.0	1440.0	581.1	340.1	1863.2	568.1	2431.3	298.8	1440.0	991.3	298.8
2008	2695.0	1567.0	611.5	370.5	1863.2	568.1	2431.3	298.8	1567.0	864.3	298.8
2009	2827.0	1699.0	642.5	401.5	1863.2	568.1	2431.3	298.8	1699.0	732.3	298.8
2010	2965.0	1837.0	675.3	434.3	1863.2	568.1	2431.3	298.8	1837.0	594.3	298.8
2011	3109.0	1981.0	709.4	468.4	1863.2	568.1	2431.3	298.8	1863.2	568.1	298.8
2012	3258.0	2130.0	745.0	504.0	1863.2	568.1	2431.3	298.8	1863.2	568.1	298.8
2013	3413.0	2285.0	782.1	541.1	1863.2	568.1	2431.3	298.8	1863.2	568.1	298.8
2014	3574.0	2446.0	820.7	579.7	1863.2	568.1	2431.3	298.8	1863.2	568.1	298.8

Power/Energy Demand & Sales

CASE: Ⅲ-140
Pmax.= 349.8MW N= 6

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1015.1	0.0	1015.1	116.6	179.0	836.1	52.0
1995	1384.0	256.0	310.0	69.0	1015.1	0.0	1015.1	116.6	256.0	759.1	69.0
1996	1461.0	333.0	327.1	86.1	1015.1	0.0	1015.1	116.6	333.0	682.1	86.1
1997	1543.0	415.0	345.2	104.2	1015.1	0.0	1015.1	116.6	415.0	600.1	104.2
1998	1628.0	500.0	364.2	123.2	1514.4	0.0	1514.4	174.9	500.0	1014.4	123.2
1999	1716.0	588.0	384.0	143.0	1863.2	847.4	2710.6	349.8	588.0	2122.6	143.0
2000	1808.0	680.0	404.7	163.7	1863.2	847.4	2710.6	349.8	680.0	2030.6	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	847.4	2710.6	349.8	776.0	1934.6	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	847.4	2710.6	349.8	876.0	1834.6	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	847.4	2710.6	349.8	980.0	1730.6	232.3
2004	2217.0	1089.0	498.5	257.5	1863.2	847.4	2710.6	349.8	1089.0	1621.6	257.5
2005	2329.0	1201.0	524.8	283.8	1863.2	847.4	2710.6	349.8	1201.0	1509.6	283.8
2006	2446.0	1318.0	552.3	311.3	1863.2	847.4	2710.6	349.8	1318.0	1392.6	311.3
2007	2568.0	1440.0	581.1	340.1	1863.2	847.4	2710.6	349.8	1440.0	1270.6	340.1
2008	2695.0	1567.0	611.5	370.5	1863.2	847.4	2710.6	349.8	1567.0	1143.6	349.8
2009	2827.0	1699.0	642.5	401.5	1863.2	847.4	2710.6	349.8	1699.0	1011.6	349.8
2010	2965.0	1837.0	675.3	434.3	1863.2	847.4	2710.6	349.8	1837.0	873.6	349.8
2011	3109.0	1981.0	709.4	468.4	1863.2	847.4	2710.6	349.8	1863.2	847.4	349.8
2012	3258.0	2130.0	745.0	504.0	1863.2	847.4	2710.6	349.8	1863.2	847.4	349.8
2013	3413.0	2285.0	782.1	541.1	1863.2	847.4	2710.6	349.8	1863.2	847.4	349.8
2014	3574.0	2446.0	820.7	579.7	1863.2	847.4	2710.6	349.8	1863.2	847.4	349.8

Power/Energy Demand & Sales

CASE- Ⅲ-160
Pmax.= 402.0MW N=-6

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1159.7	0.0	1159.7	134.0	179.0	980.7	52.0
1995	1384.0	256.0	310.0	69.0	1159.7	0.0	1159.7	134.0	256.0	903.7	69.0
1996	1461.0	333.0	327.1	86.1	1159.7	0.0	1159.7	134.0	333.0	826.7	86.1
1997	1543.0	415.0	345.2	104.2	1159.7	0.0	1159.7	134.0	415.0	744.7	104.2
1998	1628.0	500.0	364.2	123.2	1159.7	0.0	1159.7	134.0	500.0	659.7	123.2
1999	1716.0	588.0	384.0	143.0	1863.2	1097.1	2960.3	354.0	588.0	2372.3	143.0
2000	1808.0	680.0	404.7	163.7	1863.2	1097.1	2960.3	354.0	680.0	2280.3	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	1097.1	2960.3	354.0	776.0	2184.3	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	1097.1	2960.3	354.0	876.0	2084.3	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	1097.1	2960.3	354.0	980.0	1980.3	232.3
2004	2217.0	1089.0	498.5	257.5	1863.2	1097.1	2960.3	354.0	1089.0	1871.3	257.5
2005	2329.0	1201.0	524.8	283.8	1863.2	1097.1	2960.3	354.0	1201.0	1759.3	283.8
2006	2446.0	1318.0	552.3	311.3	1863.2	1097.1	2960.3	354.0	1318.0	1642.3	311.3
2007	2568.0	1440.0	581.1	340.1	1863.2	1097.1	2960.3	354.0	1440.0	1520.3	340.1
2008	2695.0	1567.0	611.5	370.5	1863.2	1097.1	2960.3	354.0	1567.0	1393.3	354.0
2009	2827.0	1699.0	642.5	401.5	1863.2	1097.1	2960.3	354.0	1699.0	1261.3	354.0
2010	2965.0	1837.0	675.3	434.3	1863.2	1097.1	2960.3	354.0	1837.0	1123.3	354.0
2011	3109.0	1981.0	709.4	468.4	1863.2	1097.1	2960.3	354.0	1863.2	1097.1	354.0
2012	3258.0	2130.0	745.0	504.0	1863.2	1097.1	2960.3	354.0	1863.2	1097.1	354.0
2013	3413.0	2285.0	782.1	541.1	1863.2	1097.1	2960.3	354.0	1863.2	1097.1	354.0
2014	3574.0	2446.0	820.7	579.7	1863.2	1097.1	2960.3	354.0	1863.2	1097.1	354.0

Power/Energy Demand & Sales

CASE Ⅲ-180
Pmax.= 449.6MW N= 8

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	978.8	0.0	978.8	112.4	179.0	799.8	52.0
1995	1384.0	256.0	310.0	69.0	978.8	0.0	978.8	112.4	256.0	722.8	69.0
1996	1461.0	333.0	327.1	86.1	978.8	0.0	978.8	112.4	333.0	645.8	86.1
1997	1543.0	415.0	345.2	104.2	1462.1	0.0	1462.1	168.6	415.0	1047.1	104.2
1998	1628.0	500.0	364.2	123.2	1462.1	0.0	1462.1	168.6	500.0	962.1	123.2
1999	1716.0	588.0	384.0	143.0	1462.1	0.0	1462.1	168.6	588.0	874.1	143.0
2000	1808.0	680.0	404.7	163.7	1863.2	1323.7	3186.9	354.0	680.0	2506.9	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	1323.7	3186.9	354.0	776.0	2410.9	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	1323.7	3186.9	354.0	876.0	2310.9	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	1323.7	3186.9	354.0	980.0	2206.9	232.3
2004	2217.0	1089.0	498.5	257.5	1863.2	1323.7	3186.9	354.0	1089.0	2097.9	257.5
2005	2329.0	1201.0	524.8	283.8	1863.2	1323.7	3186.9	354.0	1201.0	1985.9	283.8
2006	2446.0	1318.0	552.3	311.3	1863.2	1323.7	3186.9	354.0	1318.0	1868.9	311.3
2007	2568.0	1440.0	581.1	340.1	1863.2	1323.7	3186.9	354.0	1440.0	1746.9	340.1
2008	2695.0	1567.0	611.5	370.5	1863.2	1323.7	3186.9	354.0	1567.0	1619.9	354.0
2009	2827.0	1699.0	642.5	401.5	1863.2	1323.7	3186.9	354.0	1699.0	1487.9	354.0
2010	2965.0	1837.0	675.3	434.3	1863.2	1323.7	3186.9	354.0	1837.0	1349.9	354.0
2011	3109.0	1981.0	709.4	468.4	1863.2	1323.7	3186.9	354.0	1863.2	1323.7	354.0
2012	3258.0	2130.0	745.0	504.0	1863.2	1323.7	3186.9	354.0	1863.2	1323.7	354.0
2013	3413.0	2285.0	782.1	541.1	1863.2	1323.7	3186.9	354.0	1863.2	1323.7	354.0
2014	3574.0	2446.0	820.7	579.7	1863.2	1323.7	3186.9	354.0	1863.2	1323.7	354.0

Power/Energy Demand & Sales

CASE- M -200
Pmax.= 500.8MW N= 8

Year	System Demand				Supply Capacity				Project Sales		
	Total Energy Demand (GWH)	Incremental Energy Demand (GWH)	Total Peak Demand (MW)	Incremental Peak Demand (MW)	Firm Energy (GWH/Yr)	Secondary Energy (GWH/Yr)	Total Energy (GWH/Yr)	Firm Peak Output (MW)	Salable Energy (GWH/Yr)	Surplus Energy (GWH/Yr)	Useful Capacity (MW)
1987	635.0		141.1								
1988	710.0		157.7								
1989	787.0		177.4								
1990	870.0		196.3								
1991	946.0		213.3								
1992	1038.0		233.8								
1993	1128.0		241.0								
1994	1307.0	179.0	293.0	52.0	1087.5	0.0	1087.5	125.2	179.0	908.5	52.0
1995	1384.0	256.0	310.0	69.0	1087.5	0.0	1087.5	125.2	256.0	831.5	69.0
1996	1461.0	333.0	327.1	86.1	1087.5	0.0	1087.5	125.2	333.0	754.5	86.1
1997	1543.0	415.0	345.2	104.2	1087.5	0.0	1087.5	125.2	415.0	672.5	104.2
1998	1628.0	500.0	364.2	123.2	1618.5	0.0	1618.5	187.8	500.0	1118.5	123.2
1999	1716.0	588.0	384.0	143.0	1618.5	0.0	1618.5	187.8	588.0	1030.5	143.0
2000	1808.0	680.0	404.7	163.7	1863.2	1533.2	3396.4	354.0	680.0	2716.4	163.7
2001	1904.0	776.0	426.4	185.4	1863.2	1533.2	3396.4	354.0	776.0	2620.4	185.4
2002	2004.0	876.0	449.3	208.3	1863.2	1533.2	3396.4	354.0	876.0	2520.4	208.3
2003	2108.0	980.0	473.3	232.3	1863.2	1533.2	3396.4	354.0	980.0	2416.4	232.3
2004	2217.0	1089.0	498.5	257.5	1863.2	1533.2	3396.4	354.0	1089.0	2307.4	257.5
2005	2329.0	1201.0	524.8	283.8	1863.2	1533.2	3396.4	354.0	1201.0	2195.4	283.8
2006	2446.0	1318.0	552.3	311.3	1863.2	1533.2	3396.4	354.0	1318.0	2078.4	311.3
2007	2568.0	1440.0	581.1	340.1	1863.2	1533.2	3396.4	354.0	1440.0	1956.4	340.1
2008	2695.0	1567.0	611.5	370.5	1863.2	1533.2	3396.4	354.0	1567.0	1829.4	354.0
2009	2827.0	1699.0	642.5	401.5	1863.2	1533.2	3396.4	354.0	1699.0	1697.4	354.0
2010	2965.0	1837.0	675.3	434.3	1863.2	1533.2	3396.4	354.0	1837.0	1559.4	354.0
2011	3109.0	1981.0	709.4	468.4	1863.2	1533.2	3396.4	354.0	1863.2	1533.2	354.0
2012	3258.0	2130.0	745.0	504.0	1863.2	1533.2	3396.4	354.0	1863.2	1533.2	354.0
2013	3413.0	2285.0	782.1	541.1	1863.2	1533.2	3396.4	354.0	1863.2	1533.2	354.0
2014	3574.0	2446.0	820.7	579.7	1863.2	1533.2	3396.4	354.0	1863.2	1533.2	354.0

Disbursement Schedule CASE- I -60

Construction Period T= 11 years
Maximum Output P= 149.4 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	149.4	0	0	0	0	0	0	0	99.6	99.6	99.6	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	10200	0	0	0	0	2040	3060	3060	2040	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	32500	0	0	0	3250	6500	9750	9750	3250	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	2310	0	0	0	231	693	693	462	231	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	12510	0	0	0	1251	2502	3753	3753	625	0	375	250	0	0	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	2830	0	0	0	0	566	1415	849	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	146202	3900	15881	17497	17512	29188	27861	24424	9310	0	375	250	0	0	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	7130	0	0	0	0	713	1426	2852	2139	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	34200	0	0	0	0	2599	10396	7797	5198	4104	3283	820	0	0	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23625	0	5162	3500	0	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	275032	3900	15881	17498	17513	32500	47560	82412	40273	4104	8821	4571	0	0	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	20627	293	1191	1312	1313	2438	3567	6181	3020	308	662	343	0	0	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	36876	614	2501	2756	2758	4953	6506	10081	4795	441	967	504	0	0	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	332535	4807	19573	21566	21584	39891	57633	98674	48088	4853	10450	5418	0	0	0	0	0	0	0	0	0	0
O & M Cost	3601	0	0	0	0	0	0	0	2401	2401	2401	3601	3601	3601	3601	3601	3601	3601	3601	3601	3601	3601
Total (Grand Total + O&M Cost)	336136	4807	19573	21566	21584	39891	57633	98674	50489	7254	12851	9019	3601	3601	3601	3601	3601	3601	3601	3601	3601	3601

Disbursement Schedule CASE- I -70

Construction Period T= 12 years
Maximum Output P= 174.9 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	174.9	0	0	0	0	0	0	0	116.6	116.6	116.6	116.6	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	11600	0	0	0	0	2320	3480	3480	2320	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	36000	0	0	0	3600	7200	10800	10800	3600	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	2560	0	0	0	256	768	768	512	256	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	14150	0	0	0	1415	2830	4245	4245	707	0	0	424	283	0	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3140	0	0	0	0	628	1570	942	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	153302	3900	15881	17497	18051	30633	30053	26529	10047	0	0	424	283	0	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	7900	0	0	0	0	790	1580	3160	2370	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	36100	0	0	0	0	2743	10974	8230	5487	0	4332	3465	866	0	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23625	0	0	5162	3500	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	284802	3900	15881	17498	18052	34167	50483	85258	41530	0	4332	9053	4649	0	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	21360	293	1191	1312	1354	2563	3786	6394	3115	0	325	679	349	0	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	38281	614	2501	2756	2843	5205	6930	10492	4967	0	466	994	514	0	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	344443	4807	19573	21566	22249	41935	61199	102144	49612	0	5123	10726	5512	0	0	0	0	0	0	0	0	0
O & M Cost	3726	0	0	0	0	0	0	0	2484	2484	2484	2484	3726	3726	3726	3726	3726	3726	3726	3726	3726	3726
Total (Grand Total + O&M Cost)	348169	4807	19573	21566	22249	41935	61199	102144	52096	2484	7607	13210	9238	3726	3726	3726	3726	3726	3726	3726	3726	3726

Disbursement Schedule CASE- I -80

Construction Period T= 13 years
Maximum Output P= 201 MW

Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	201	0	0	0	0	0	0	0	134	134	134	134	134	201	201	201	201	201	201	201	201	201
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	12632	0	0	0	0	2526	3789	3789	2526	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	38424	0	0	0	3842	7684	11527	11527	3842	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	2728	0	0	0	272	818	818	545	272	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	15769	0	0	0	1576	3153	4730	4730	788	0	0	0	473	315	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3345	0	0	0	0	669	1672	1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	158750	3900	15881	17497	18472	31739	31729	28147	10593	0	0	0	473	315	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	8674	0	0	0	0	867	1734	3469	2602	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	38400	0	0	0	0	2918	11596	8716	5798	0	0	4684	3763	921	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	0	0	5162	3412	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	293324	3900	15881	17498	18473	35525	52936	87671	42707	0	0	4685	9399	4649	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	21999	293	1191	1312	1385	2664	3970	6575	3203	0	0	351	705	349	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	39470	614	2501	2756	2909	5406	7277	10832	5121	0	0	504	1034	516	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	354793	4807	19573	21566	22767	43595	64183	105078	51031	0	0	5540	11138	5514	0	0	0	0	0	0	0	0
O & M Cost	3841	0	0	0	0	0	0	0	2561	2561	2561	2561	2561	3841	3841	3841	3841	3841	3841	3841	3841	3841
Total (Grand Total + O&M Cost)	358634	4807	19573	21566	22767	43595	64183	105078	53592	2561	2561	8101	13699	9355	3841	3841	3841	3041	3841	3841	3841	3841

Disbursement Schedule CASE- I -90

Construction Period T= 14 years
Maximum Output P= 224.8 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	224.8	0	0	0	0	0	0	0	112.4	112.4	112.4	168.6	168.6	168.6	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	14450	0	0	0	0	2890	4335	4335	2890	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	43050	0	0	0	4305	8610	12915	12915	4305	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	3060	0	0	0	306	918	918	612	306	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	18430	0	0	0	1843	3686	5529	4607	921	0	552	368	0	552	368	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3750	0	0	0	0	750	1875	1125	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	168592	3900	15881	17497	19234	33741	34762	30145	11586	0	552	368	0	552	368	0	0	0	0	0	0	0
2. Hydraulic Equipment	9490	0	0	0	0	949	1898	3796	2847	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	44700	0	0	0	0	2816	11219	8448	5632	4157	3307	849	4157	3307	804	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	5162	3412	0	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	310282	3900	15881	17498	19235	37506	55755	89727	43778	4157	9023	4630	4157	3861	1173	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	23271	293	1191	1312	1443	2813	4182	6730	3283	312	677	347	312	290	88	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	41785	614	2501	2756	3030	5719	7732	11153	5285	447	998	516	447	443	145	0	0	0	0	0	0	0
Grand Total (5+6+7)	375338	4807	19573	21566	23708	46038	67669	107610	52346	4916	10698	5493	4916	4594	1406	0	0	0	0	0	0	0
O & M Cost	4082	0	0	0	0	0	0	0	2041	2041	2041	3062	3062	3062	4082	4082	4082	4082	4082	4082	4082	4082
Total (Grand Total + O&M Cost)	379420	4807	19573	21566	23708	46038	67669	107610	54387	6957	12739	8555	7978	7656	5488	4082	4082	4082	4082	4082	4082	4082

Disbursement Schedule CASE - I - 100

Construction Period T= 15 years
Maximum Output P= 250.4 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	250.4	0	0	0	0	0	0	0	125.2	125.2	125.2	125.2	187.8	187.8	187.8	250.4	250.4	250.4	250.4	250.4	250.4	250.4
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	16000	0	0	0	0	3200	4800	4800	3200	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	46000	0	0	0	4600	9200	13800	13800	4600	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	3270	0	0	0	327	981	981	654	327	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	20520	0	0	0	2052	4104	6156	5130	1026	0	0	615	410	0	615	410	0	0	0	0	0	0
1-9 Tailrace Tunnel	4000	0	0	0	0	800	2000	1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	175642	3900	15881	17497	19759	35172	36927	32134	12316	0	0	615	410	0	615	410	0	0	0	0	0	0
2. Hydraulic Equipment	10400	0	0	0	0	1040	2080	4160	3120	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	46200	0	0	0	0	2910	11596	8685	5821	0	4296	3418	877	4296	3418	877	0	0	0	0	0	0
4. Transmission Line & Substation	101400	0	0	0	0	0	7909	47556	23626	0	0	5070	3447	0	8213	5577	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	333642	3900	15881	17498	19760	39123	58513	92537	44884	0	4297	9104	4736	4297	12248	6865	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	25023	293	1191	1312	1482	2934	4388	6940	3366	0	322	683	355	322	919	515	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	44649	614	2501	2756	3112	5964	8136	11554	5441	0	462	1010	530	462	1347	759	0	0	0	0	0	0
Grand Total (5+6+7)	403314	4807	19573	21566	24354	48021	71037	111031	53691	0	5081	10797	5621	5081	14514	8139	0	0	0	0	0	0
O & M Cost	4409	0	0	0	0	0	0	0	2205	2205	2205	2205	3307	3307	3307	4409	4409	4409	4409	4409	4409	4409
Total (Grand Total + O&M Cost)	407723	4807	19573	21566	24354	48021	71037	111031	55896	2205	7286	13002	8928	8388	17821	12548	4409	4409	4409	4409	4409	4409

Disbursement Schedule CASE- I -80-830

Construction Period T= 12 years
Maximum Output P= 193.8 MW
Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	193.8	0	0	0	0	0	0	0	129.2	129.2	129.2	129.2	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	19800	0	0	0	1980	5940	5940	3960	1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	12632	0	0	0	0	2526	3789	3789	2526	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	38424	0	0	0	3842	7684	11527	11527	3842	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	2728	0	0	0	272	818	818	545	272	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	15769	0	0	0	1576	3153	4730	4730	788	0	0	473	315	0	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3345	0	0	0	0	669	1672	1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	152150	3900	15881	17497	17812	29759	29749	26827	9933	0	0	473	315	0	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	8485	0	0	0	0	848	1697	3394	2545	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	38100	0	0	0	0	2895	11506	8648	5753	0	4648	3733	914	0	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	0	5162	3412	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	286235	3900	15881	17498	17813	33504	50827	86208	41945	0	4648	9369	4642	0	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	21468	293	1191	1312	1336	2513	3812	6466	3146	0	349	703	348	0	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	38378	614	2501	2756	2806	5090	6951	10609	5006	0	500	1031	515	0	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	346081	4807	19573	21566	21955	41107	61590	103283	50097	0	5497	11103	5505	0	0	0	0	0	0	0	0	0
O & M Cost	3766	0	0	0	0	0	0	0	2511	2511	2511	2511	3766	3766	3766	3766	3766	3766	3766	3766	3766	3766
Total (Grand Total + O&M Cost)	349847	4807	19573	21566	21955	41107	61590	103283	52608	2511	8008	13614	9271	3766	3766	3766	3766	3766	3766	3766	3766	3766

Disbursement Schedule CASE-- 1 -80-855

Construction Period T= 13 years
Maximum Output P= 211.2 MW

Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	211.2	0	0	0	0	0	0	0	140.8	140.8	140.8	140.8	140.8	211.2	211.2	211.2	211.2	211.2	211.2	211.2	211.2	211.2
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	39999	0	0	0	3999	11999	11999	7999	3999	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	15532	0	0	0	0	3106	4659	4659	3106	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	38424	0	0	0	3842	7684	11527	11527	3842	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	2810	0	0	0	281	843	843	562	281	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	16242	0	0	0	1624	3248	4872	4872	812	0	0	0	487	324	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3345	0	0	0	0	669	1672	1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	175804	3900	15881	17497	19888	36518	36845	31895	12565	0	0	0	487	324	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	9680	0	0	0	0	968	1936	3872	2904	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	39300	0	0	0	0	2947	11829	8881	5934	0	0	4833	3890	982	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	0	0	5162	3412	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	312284	3900	15881	17498	19888	40434	58486	91987	45116	0	0	4834	9540	4720	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	23421	293	1191	1312	1492	3033	4386	6899	3384	0	0	363	716	354	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	42361	614	2501	2756	3132	6173	8129	11483	5478	0	0	520	1050	524	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	378066	4807	19573	21566	24512	49640	71001	110369	53978	0	0	5717	11306	5598	0	0	0	0	0	0	0	0
O & M Cost	4050	0	0	0	0	0	0	0	2700	2700	2700	2700	2700	4050	4050	4050	4050	4050	4050	4050	4050	4050
Total (Grand Total + O&M Cost)	382116	4807	19573	21566	24512	49640	71001	110369	56678	2700	2700	8417	14006	9648	4050	4050	4050	4050	4050	4050	4050	4050

Disbursement Schedule CASE- I -80-875

Construction Period T= 14 years
Maximum Output P= 223.6 MW
Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	223.6	0	0	0	0	0	0	0	111.8	111.8	111.8	167.7	167.7	167.7	223.6	223.6	223.6	223.6	223.6	223.6	223.6	223.6
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	78728	0	0	0	7872	23618	23618	15745	7872	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	17675	0	0	0	0	3535	5302	5302	3535	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	38646	0	0	0	3864	7729	11593	11593	3864	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	3002	0	0	0	300	900	900	600	300	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	18356	0	0	0	1835	3671	5506	4589	917	0	550	367	0	550	367	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3345	0	0	0	0	669	1672	1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	219204	3900	15881	17497	24014	49090	49865	40105	17014	0	550	367	0	550	367	0	0	0	0	0	0	0
2. Hydraulic Equipment	10624	0	0	0	0	1062	2124	4249	3187	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	44700	0	0	0	0	2816	11219	8403	5632	4157	3307	849	4157	3307	849	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	5162	3412	0	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	362028	3900	15881	17498	24014	52969	71085	100096	49546	4157	9021	4629	4157	3858	1216	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	27152	293	1191	1312	1801	3973	5331	7507	3716	312	677	347	312	289	91	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	49878	614	2501	2756	3782	8149	10135	12766	6177	447	997	516	447	442	149	0	0	0	0	0	0	0
Grand Total (5+6+7)	439058	4807	19573	21566	29597	65091	86551	120369	59439	4916	10695	5492	4916	4589	1456	0	0	0	0	0	0	0
O & M Cost	4611	0	0	0	0	0	0	0	2306	2306	2306	3458	3458	3458	4611	4611	4611	4611	4611	4611	4611	4611
Total (Grand Total + O&M Cost)	443669	4807	19573	21566	29597	65091	86551	120369	61745	7222	13001	8950	8374	8047	6067	4611	4611	4611	4611	4611	4611	4611

Disbursement Schedule CASE I -80-S

Construction Period T: 11 years
Maximum Output P= 149.1 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	149.1	0	0	0	0	0	0	0	99.4	99.4	99.4	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	12632	0	0	0	0	2526	3789	3789	2526	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	24773	0	0	0	2477	4954	7431	7431	2477	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	2350	0	0	0	235	705	705	470	235	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	12532	0	0	0	1253	2506	3759	3759	626	0	375	250	0	0	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3345	0	0	0	0	669	1672	1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	141484	3900	15881	17497	16746	28248	26549	23005	9029	0	375	250	0	0	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	7277	0	0	0	0	727	1455	2910	2183	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	33080	0	0	0	0	2514	10056	7542	5028	3969	3175	793	0	0	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23625	0	5162	3500	0	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	269341	3900	15881	17498	16746	31490	45936	80796	39865	3970	8714	4545	0	0	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	20201	293	1191	1312	1256	2362	3445	6060	2990	298	654	341	0	0	0	0	0	0	0	0	0	0
7. Physical Contingency I×15% + (2+3+4+6)×10%	36028	614	2501	2756	2638	4798	6266	9836	4737	427	956	501	0	0	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	325570	4807	19573	21566	20640	38650	55647	96692	47592	4695	10324	5387	0	0	0	0	0	0	0	0	0	0
O & M Cost	3534	0	0	0	0	0	0	0	2356	2356	2356	3534	3534	3534	3534	3534	3534	3534	3534	3534	3534	3534
Total (Grand Total + O&M Cost)	329104	4807	19573	21566	20640	38650	55647	96692	49948	7051	12680	8921	3534	3534	3534	3534	3534	3534	3534	3534	3534	3534

Disbursement Schedule CASE- 1 -80-K

Construction Period T= 13 years
Maximum Output P= 211.8 MW
Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	211.8	0	0	0	0	0	0	0	141.2	141.2	141.2	141.2	141.2	211.8	211.8	211.8	211.8	211.8	211.8	211.8	211.8	211.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	12632	0	0	0	0	2526	3789	3789	2526	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	40725	0	0	0	4072	8145	12217	12217	4072	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	4469	0	0	0	446	1340	1340	893	446	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	17744	0	0	0	1774	3548	5323	5323	887	0	0	0	532	354	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3345	0	0	0	0	669	1672	1003	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	164767	3900	15881	17497	19074	33117	33534	29778	11096	0	0	0	532	354	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	13122	0	0	0	0	1312	2624	5248	3936	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	38990	0	0	0	0	2924	11735	8811	5887	0	0	4795	3860	974	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	0	0	5162	3412	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	304379	3900	15881	17498	19075	37353	55770	91176	44633	0	0	4796	9555	4742	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	22828	293	1191	1312	1431	2801	4183	6838	3347	0	0	360	717	356	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	40959	614	2501	2756	3004	5671	7672	11290	5353	0	0	516	1054	528	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	368166	4807	19573	21566	23510	45825	67625	109304	53333	0	0	5672	11326	5626	0	0	0	0	0	0	0	0
O & M Cost	4002	0	0	0	0	0	0	0	2668	2668	2668	2668	2668	4002	4002	4002	4002	4002	4002	4002	4002	4002
Total (Grand Total + O&M Cost)	372168	4807	19573	21566	23510	45825	67625	109304	56001	2668	2668	8340	13994	9628	4002	4002	4002	4002	4002	4002	4002	4002

Disbursement Schedule CASE- II -60

Construction Period T= 11 years
Maximum Output P= 149.4 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	149.4	0	0	0	0	0	0	0	99.6	99.6	99.6	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4	149.4
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	526	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	20400	0	0	0	0	4080	6120	6120	4080	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	32500	0	0	0	3250	6500	9750	9750	3250	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	3822	0	0	0	382	1146	1146	764	382	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	18210	0	0	0	1821	3642	5463	5463	910	0	546	364	0	0	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	3747	0	0	0	0	749	1873	1124	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	164531	3900	15881	17497	18234	33005	33543	29772	11786	0	546	364	0	0	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	7720	0	0	0	0	772	1544	3088	2316	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	34200	0	0	0	0	2599	10396	7797	5198	4104	3283	820	0	0	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23625	0	5162	3500	0	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	293951	3900	15881	17498	18234	36376	53360	87995	42926	4104	8992	4685	0	0	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	22046	293	1191	1312	1368	2728	4002	6600	3219	308	674	351	0	0	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	39826	614	2501	2756	2872	5561	7413	10948	5204	441	994	522	0	0	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	355823	4807	19573	21566	22474	44665	64775	105543	51349	4853	10660	5558	0	0	0	0	0	0	0	0	0	0
O & M Cost	3796	0	0	0	0	0	0	0	2531	2531	2531	3796	3796	3796	3796	3796	3796	3796	3796	3796	3796	3796
Total (Grand Total + O&M Cost)	359619	4807	19573	21566	22474	44665	64775	105543	53880	7384	13191	9354	3796	3796	3796	3796	3796	3796	3796	3796	3796	3796

Disbursement Schedule CASE- II -70

Construction Period T= 12 years
Maximum Output P= 174.9 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	174.9	0	0	0	0	0	0	0	116.6	116.6	116.6	116.6	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	23200	0	0	0	0	4640	6960	6960	4640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	36000	0	0	0	3600	7200	10800	10800	3600	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	4078	0	0	0	407	1223	1223	815	407	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	19541	0	0	0	1954	3908	5862	5862	977	0	0	586	390	0	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	4092	0	0	0	0	818	2046	1227	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	172763	3900	15881	17497	18742	34677	36082	32216	12788	0	0	586	390	0	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	8399	0	0	0	0	839	1679	3359	2519	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	36100	0	0	0	0	2743	10974	8230	5487	0	4332	3465	866	0	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23625	0	0	5162	3500	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	304762	3900	15881	17498	18743	38261	56612	91144	44421	0	4332	9214	4757	0	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	22857	293	1191	1312	1406	2870	4246	6836	3332	0	325	691	357	0	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	41400	614	2501	2756	2952	5847	7890	11409	5415	0	466	1020	531	0	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	369019	4807	19573	21566	23101	46978	68748	109389	53168	0	5123	10925	5645	0	0	0	0	0	0	0	0	0
O & M Cost	3930	0	0	0	0	0	0	0	2620	2620	2620	2620	3930	3930	3930	3930	3930	3930	3930	3930	3930	3930
Total (Grand Total + O&M Cost)	372949	4807	19573	21566	23101	46978	68748	109389	55788	2620	7743	13545	9575	3930	3930	3930	3930	3930	3930	3930	3930	3930

Disbursement Schedule CASE-II-80

Construction Period T= 13 years
Maximum Output P 201 MW

Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	201	0	0	0	0	0	0	0	134	134	134	134	134	201	201	201	201	201	201	201	201	201
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	25263	0	0	0	0	5052	7578	7578	5052	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	38424	0	0	0	3842	7684	11527	11527	3842	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	4373	0	0	0	437	1311	1311	874	437	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	21467	0	0	0	2146	4293	6440	6440	1073	0	0	0	644	429	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	4365	0	0	0	0	873	2182	1309	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	179744	3900	15881	17497	19207	36102	38231	34281	13569	0	0	0	644	429	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	9554	0	0	0	0	955	1910	3821	2866	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	38400	0	0	0	0	2918	11596	8716	5798	0	0	4684	3763	921	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	0	0	5162	3412	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	315198	3900	15881	17498	19207	39977	59614	94157	45947	0	0	4685	9570	4763	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	23640	293	1191	1312	1441	2998	4471	7062	3446	0	0	351	718	357	0	0	0	0	0	0	0	0
7. Physical Contingency I×15% + (2+3+4+6)×10%	42871	614	2501	2756	3025	6103	8320	11836	5618	0	0	504	1061	534	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	381709	4807	19573	21566	23673	49078	72405	113055	55011	0	0	5540	11349	5654	0	0	0	0	0	0	0	0
O & M Cost	4069	0	0	0	0	0	0	0	2713	2713	2713	2713	2713	4069	4069	4069	4069	4069	4069	4069	4069	4069
Total (Grand Total + O&M Cost)	385778	4807	19573	21566	23673	49078	72405	113055	57724	2713	2713	8253	14062	9723	4069	4069	4069	4069	4069	4069	4069	4069

Disbursement Schedule CASE II-90

Construction Period T= 14 years
Maximum Output P= 224.8 MW
Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	224.8	0	0	0	0	0	0	0	112.4	112.4	112.4	168.6	168.6	168.6	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	28900	0	0	0	0	5780	8670	8670	5780	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	43050	0	0	0	4305	8610	12915	12915	4305	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	5015	0	0	0	501	1504	1504	1003	501	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	23702	0	0	0	2370	4740	7110	5925	1185	0	711	474	0	711	474	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	4928	0	0	0	0	985	2464	1478	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	191447	3900	15881	17497	19957	38507	41854	36542	14935	0	711	474	0	711	474	0	0	0	0	0	0	0
2. Hydraulic Equipment	10771	0	0	0	0	1077	2154	4308	3231	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	44700	0	0	0	0	2816	11219	8448	5632	4157	3307	849	4157	3307	804	0	0	0	0	0	0	0
4. Transmission Line & Substation	87500	0	0	0	0	0	7875	47337	23712	0	5162	3412	0	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	334418	3900	15881	17498	19958	42401	63104	96637	47511	4157	9181	4736	4157	4019	1279	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	25081	293	1191	1312	1497	3180	4733	7248	3563	312	689	355	312	301	96	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	45522	614	2501	2756	3143	6483	8876	12216	5854	447	1023	533	447	468	161	0	0	0	0	0	0	0
Grand Total (5+6+7)	405021	4807	19573	21566	24598	52064	76713	116101	56928	4916	10893	5624	4916	4788	1536	0	0	0	0	0	0	0
O & M Cost	4336	0	0	0	0	0	0	0	2168	2168	2168	3252	3252	3252	4336	4336	4336	4336	4336	4336	4336	4336
Total (Grand Total + O&M Cost)	409357	4807	19573	21566	24598	52064	76713	116101	59096	7084	13061	8876	8168	8040	5872	4336	4336	4336	4336	4336	4336	4336

Disbursement Schedule CASE - II -100

Construction Period T= 15 years
Maximum Output P= 250.4 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	250.4	0	0	0	0	0	0	0	125.2	125.2	125.2	125.2	187.8	187.8	187.8	250.4	250.4	250.4	250.4	250.4	250.4	250.4
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	32000	0	0	0	0	6400	9600	9600	6400	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	46000	0	0	0	4600	9200	13800	13800	4600	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 Penstock	5260	0	0	0	526	1578	1578	1052	526	0	0	0	0	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	25254	0	0	0	2525	5050	7576	6313	1262	0	0	757	505	0	757	505	0	0	0	0	0	0
1-9 Tailrace Tunnel	5282	0	0	0	0	1056	2641	1584	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	199648	3900	15881	17497	20432	40172	44385	38900	15952	0	0	757	505	0	757	505	0	0	0	0	0	0
2. Hydraulic Equipment	12062	0	0	0	0	1206	2412	4824	3618	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	46200	0	0	0	0	2910	11596	8685	5821	0	4296	3418	877	4296	3418	877	0	0	0	0	0	0
4. Transmission Line & Substation	101400	0	0	0	0	0	7909	47556	23626	0	0	5070	3447	0	8213	5577	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	359310	3900	15881	17498	20432	44289	66304	99968	49019	0	4297	9246	4830	4297	12390	6960	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	26948	293	1191	1312	1532	3322	4973	7498	3676	0	322	693	362	322	929	522	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	48608	614	2501	2756	3218	6770	9347	12692	6067	0	462	1032	545	462	1370	773	0	0	0	0	0	0
Grand Total (5+6+7)	434866	4807	19573	21566	25182	54381	80624	120158	58762	0	5081	10971	5737	5081	14689	8255	0	0	0	0	0	0
O & M Cost	4683	0	0	0	0	0	0	0	2342	2342	2342	2342	3512	3512	3512	4683	4683	4683	4683	4683	4683	4683
Total (Grand Total + O&M Cost)	439549	4807	19573	21566	25182	54381	80624	120158	61104	2342	7423	13313	9249	8593	18201	12938	4683	4683	4683	4683	4683	4683

Disbursement Schedule CASE - III - 120

Construction Period T= 13 years
Maximum Output P= 298.8 MW
Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	298.8	0	0	0	0	0	0	0	99.6	99.6	99.6	149.4	149.4	298.8	298.8	298.8	298.8	298.8	298.8	298.8	298.8	298.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	20400	0	0	0	0	4080	6120	6120	4080	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	65000	0	0	0	3250	6500	9750	9750	6500	6500	9750	9750	3250	0	0	0	0	0	0	0	0	0
1-7 Penstock	6457	0	0	0	387	1162	1162	774	387	0	774	1033	774	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	22765	0	0	0	1889	3778	5668	5668	978	0	682	1821	2048	227	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	5036	0	0	0	0	745	1863	1117	0	0	0	654	654	0	0	0	0	0	0	0	0	0
Sub Total	205510	3900	15881	17497	18307	33153	33754	29982	15110	6500	11207	13259	6728	227	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	12226	0	0	0	0	770	1540	3080	2310	0	0	2445	2078	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	61200	0	0	0	0	2601	10397	7803	5202	4094	3280	14320	10801	2698	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	107000	0	0	0	0	0	7918	47294	23647	0	0	16906	11235	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	385936	3900	15881	17498	18308	36525	53611	88160	46270	10594	14488	46931	30844	2927	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	28945	293	1191	1312	1373	2739	4021	6612	3470	795	1087	3520	2313	220	0	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	51764	614	2501	2756	2883	5584	7451	10976	5729	1464	2118	5708	3652	326	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	466645	4807	19573	21566	22564	44848	65083	105748	55469	12853	17693	56159	36809	3473	0	0	0	0	0	0	0	0
O & M Cost	5129	0	0	0	0	0	0	0	1710	1710	1710	2565	2565	5129	5129	5129	5129	5129	5129	5129	5129	5129
Total (Grand Total + O&M Cost)	471774	4807	19573	21566	22564	44848	65083	105748	57179	14563	19403	58724	39374	8602	5129	5129	5129	5129	5129	5129	5129	5129

Disbursement Schedule CASE-III-140

Construction Period T= 13 years
Maximum Output P= 349.8 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	349.8	0	0	0	0	0	0	0	116.6	116.6	116.6	116.6	174.9	349.8	349.8	349.8	349.8	349.8	349.8	349.8	349.8	349.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	23200	0	0	0	0	4640	6960	6960	4640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	72000	0	0	0	3600	7200	10800	10800	7200	7200	10800	10800	3600	0	0	0	0	0	0	0	0	0
1-7 Penstock	6900	0	0	0	414	1242	1242	828	414	0	828	1104	828	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	24372	0	0	0	2022	4045	6068	6068	1047	0	0	2680	2193	243	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	5500	0	0	0	0	814	2035	1221	0	0	0	715	715	0	0	0	0	0	0	0	0	0
Sub Total	217824	3900	15881	17497	18817	34828	36296	32428	16465	7200	11628	15299	7336	243	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	13300	0	0	0	0	837	1675	3351	2513	0	0	2660	2261	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	64800	0	0	0	0	2741	10957	8223	5482	0	4348	17832	12344	2870	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	107000	0	0	0	0	0	7918	47294	23647	0	0	16906	11235	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	402924	3900	15881	17498	18818	38408	56848	91297	48109	7200	15976	52699	33177	3114	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	30219	293	1191	1312	1411	2881	4264	6847	3608	540	1198	3952	2488	234	0	0	0	0	0	0	0	0
7. Physical Contingency I×15% + (2+3+4+6)×10%	54206	614	2501	2756	2964	5870	7926	11436	5995	1134	2299	6430	3933	347	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	487349	4807	19573	21566	23193	47159	69038	109580	57712	8874	19473	63081	39598	3695	0	0	0	0	0	0	0	0
O & M Cost	5345	0	0	0	0	0	0	0	1782	1782	1782	1782	2673	5345	5345	5345	5345	5345	5345	5345	5345	5345
Total (Grand Total + O&M Cost)	492694	4807	19573	21566	23193	47159	69038	109580	59494	10656	21255	64863	42271	9040	5345	5345	5345	5345	5345	5345	5345	5345

Disbursement Schedule CASE - III -160

Construction Period T= 13 years
Maximum Output P= 402 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	402	0	0	0	0	0	0	0	134	134	134	134	134	402	402	402	402	402	402	402	402	402
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	25263	0	0	0	0	5052	7578	7578	5052	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	76847	0	0	0	3842	7684	11527	11527	7684	7684	11527	11527	3842	0	0	0	0	0	0	0	0	0
1-7 Penstock	7405	0	0	0	444	1332	1332	888	444	0	888	1184	888	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	25920	0	0	0	2151	4302	6454	6454	1114	0	0	2851	2332	259	0	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	5860	0	0	0	0	867	2168	1300	0	0	0	761	761	0	0	0	0	0	0	0	0	0
Sub Total	227147	3900	15881	17497	19218	36127	38251	34300	17459	7684	12415	16324	7825	259	0	0	0	0	0	0	0	0
2. Hydraulic Equipment	15128	0	0	0	0	953	1906	3812	2859	0	0	3025	2571	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	69400	0	0	0	0	2914	11589	8675	5829	0	0	20195	16170	4025	0	0	0	0	0	0	0	0
4. Transmission Line & Substation	107000	0	0	0	0	0	7918	47294	23647	0	0	16906	11235	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	418675	3900	15881	17498	19219	39995	59666	94082	49796	7685	12416	56452	37803	4284	0	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	31401	293	1191	1312	1441	3000	4475	7056	3735	576	931	4234	2835	321	0	0	0	0	0	0	0	0
7. Physical Contingency I ×15% + (2+3+4+6)×10%	56365	614	2501	2756	3027	6106	8327	11829	6226	1210	1955	6885	4455	474	0	0	0	0	0	0	0	0
Grand Total (5+6+7)	506441	4807	19573	21566	23687	49101	72468	112967	59757	9471	15302	67571	45093	5079	0	0	0	0	0	0	0	0
O & M Cost	5567	0	0	0	0	0	0	0	1856	1856	1856	1856	1856	5567	5567	5567	5567	5567	5567	5567	5567	5567
Total (Grand Total + O&M Cost)	512008	4807	19573	21566	23687	49101	72468	112967	61613	11327	17158	69427	46949	10646	5567	5567	5567	5567	5567	5567	5567	5567

Disbursement Schedule CASE III 180

Construction Period T= 14 years
Maximum Output P= 449.6 MW
Unit: 1,000 US$

	Const. Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	449.6	0	0	0	0	0	0	0	112.4	112.4	112.4	168.6	168.6	168.6	449.6	449.6	449.6	449.6	449.6	449.6	449.6	449.6
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	28900	0	0	0	0	5780	8670	8670	5780	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	86100	0	0	0	4305	8610	12915	12915	8610	8610	12915	12915	4305	0	0	0	0	0	0	0	0	0
1-7 Penstock	8486	0	0	0	509	1527	1527	1018	509	0	1018	1357	1018	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	29398	0	0	0	2440	4880	7320	6144	1264	0	881	2351	2939	881	293	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	6624	0	0	0	0	980	2450	1470	0	0	0	861	861	0	0	0	0	0	0	0	0	0
Sub Total	245360	3900	15881	17497	20034	38665	42074	36768	19327	8610	14815	17485	9124	881	293	0	0	0	0	0	0	0
2. Hydraulic Equipment	17056	0	0	0	0	1074	2149	4298	3223	0	0	3411	2899	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	82900	0	0	0	0	2810	11241	8430	5620	4153	3316	19929	19431	7137	829	0	0	0	0	0	0	0
4. Transmission Line & Substation	107000	0	0	0	0	0	7918	47294	23647	0	0	16906	11235	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	452316	3900	15881	17498	20035	42550	63382	96792	51818	12763	18131	57732	42691	8020	1123	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	33924	293	1191	1312	1503	3191	4754	7259	3886	957	1360	4330	3202	602	84	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	60892	614	2501	2756	3156	6507	8917	12244	6537	1803	2690	7080	5045	906	135	0	0	0	0	0	0	0
Grand Total (5+6+7)	547132	4807	19573	21566	24694	52248	77053	116295	62241	15523	22181	69142	50938	9528	1342	0	0	0	0	0	0	0
O & M Cost	6058	0	0	0	0	0	0	0	1515	1515	1515	2272	2272	2272	6058	6058	6058	6058	6058	6058	6058	6058
Total (Grand Total + O&M Cost)	553190	4807	19573	21566	24694	52248	77053	116295	63756	17038	23696	71414	53210	11800	7400	6058	6058	6058	6058	6058	6058	6058

Disbursement Schedule CASE-III-200

Construction Period T= 14 years
Maximum Output P= 500.8 MW
Unit: 1,000 US$

	Const.Cost 1,000US$	1 1987	2 1988	3 1989	4 1990	5 1991	6 1992	7 1993	8 1994	9 1995	10 1996	11 1997	12 1998	13 1999	14 2000	15 2001	16 2002	17 2003	18 2004	19 2005	20 2006	21 2007
Installed Capacity (MW)	500.8	0	0	0	0	0	0	0	125.2	125.2	125.2	125.2	187.8	187.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8
1. Civil Works																						
1-1 Access Road	39000	3900	13650	13650	3900	3900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 Preparatory Works	9700	0	2231	1697	1940	766	1270	1270	523	0	0	0	0	0	0	0	0	0	0	0	0	0
1-3 Diversion & Coffer Dam	10752	0	0	2150	4300	4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 Dam & Spillway	26400	0	0	0	2640	7920	7920	5280	2640	0	0	0	0	0	0	0	0	0	0	0	0	0
1-5 Intake & Desilting Basin	32000	0	0	0	0	6400	9600	9600	6400	0	0	0	0	0	0	0	0	0	0	0	0	0
1-6 Headrace & Surge Tank	92000	0	0	0	4600	9200	13800	13800	9200	9200	13800	13800	4600	0	0	0	0	0	0	0	0	0
1-7 Penstock	8900	0	0	0	534	1602	1602	1068	534	0	1068	1424	1068	0	0	0	0	0	0	0	0	0
1-8 Powerhouse & Switchyard	31272	0	0	0	2595	5191	7786	6535	1344	0	0	3127	3439	938	312	0	0	0	0	0	0	0
1-9 Tailrace Tunnel	7100	0	0	0	0	1050	2627	1576	0	0	0	923	923	0	0	0	0	0	0	0	0	0
Sub Total	257124	3900	15881	17497	20510	40331	44606	39130	20642	9200	14868	19274	10030	938	312	0	0	0	0	0	0	0
2. Hydraulic Equipment	19100	0	0	0	0	1203	2406	4813	3609	0	0	3820	3247	0	0	0	0	0	0	0	0	0
3. Electromechanical Facilities	86500	0	0	0	0	2897	11599	8701	5804	0	4299	23588	21279	7473	856	0	0	0	0	0	0	0
4. Transmission Line & Substation	107000	0	0	0	0	0	7918	47294	23647	0	0	16906	11235	0	0	0	0	0	0	0	0	0
5. Total Cost (1+2+3+4)	469724	3900	15881	17498	20510	44432	66531	99940	53704	9200	19167	63589	45792	8412	1169	0	0	0	0	0	0	0
6. Engineering & Administration 5×7.5%	35229	293	1191	1312	1538	3332	4990	7496	4028	690	1438	4769	3434	631	88	0	0	0	0	0	0	0
7. Physical Contingency 1×15% + (2+3+4+6)×10%	63352	614	2501	2756	3230	6793	9382	12700	6805	1449	2804	7799	5424	951	141	0	0	0	0	0	0	0
Grand Total (5+6+7)	568305	4807	19573	21566	25278	54557	80903	120136	64537	11339	23409	76157	54650	9994	1398	0	0	0	0	0	0	0
O & M Cost	6288	0	0	0	0	0	0	0	1572	1572	1572	1572	2358	2358	6288	6288	6288	6288	6288	6288	6288	6288
Total (Grand Total + O&M Cost)	574593	4807	19573	21566	25278	54557	80903	120136	66109	12911	24981	77729	57008	12352	7686	6288	6288	6288	6288	6288	6288	6288