

Salient Features

Sl. No	Description	Details
1	Name of the project	Krishna (Nagarjunasagar) - Pennar (Somasila) Link Project
2	Purpose	Diversion of 12146 Mm ³ of combined Mahanadi and Godavari surplus waters brought into the Nagarjunasagar reservoir taking over the requirements of the part command of NSRBC and to meet the irrigation and domestic requirements of enroute basins and further transfer to water short Pennar, Cauvery, Vaigai and Gundar basins. Net diversion through the link canal excluding the requirement of 2356 Mm ³ of existing part ayacut of NSRBC is 9790 Mm ³ .
3	Quantum of diversion	12146 Mm ³
a)	Through NSRBC	3979 Mm ³
b)	i) Through N-S link (up to RD 202.75 km	8167 Mm ³
	ii) Through N-S link (beyond RD 202.75 km)	9790 Mm ³
4	Enroute irrigation (Utilisation)	
a)	Total annual irrigation	581350 ha (3264 Mm ³)
	i) Existing area under NSRBC	413333 ha (2356 Mm ³)
	ii) Proposed area under N-S link	168017 ha (908 Mm ³)
b)	Total CCA	463255 ha
	i) Existing area under NSRBC	295238 ha
	ii) Proposed area under N-S link	168017 ha

5	Head Works		
A	Nagarjunasagar dam		
	i) State	Andhra Pradesh	
	ii) District	Nalgonda	
	iii) River	Krishna	
	iv) Catchment area	220705 km ²	
	v) Full reservoir level	179.83 m	
	vi) Minimum draw down level	155.45 m	
	vii) Gross storage at FRL	11560 Mm ³	
	viii) Live storage at FRL (upto MDDL)	5733 Mm ³	
	ix) Reservoir submergence	284.90 km ²	
B	Somasila dam		
	i) State	Andhra Pradesh	
	ii) District	Nellore	
	iii) River	Pennar	
	iv) Catchment area	50492.5 km ²	
	v) Full reservoir level	100.58 m	
	vi) Minimum draw down level	82.3 m	
	vii) Gross storage at FRL	2208 Mm ³	
	viii) Live storage at FRL	1994 Mm ³	
	ix) Reservoir submergence	212.28 km ²	
6	Link Canal		
	i) Hydraulic particulars of link canal At:	Design discharge	Bed width x Dep 'm'
	Off take	488	21.30 x 7
	RD 202.75 km	565	67.50 x 6
	Tail end	498	58.90 x 6
	ii) Bed slope of canal	Varies from '1 in 2200' to '1 in 20000'	
	iii) Length of canal including tunnel	393.02 km	
	iv) Length of tunnel	1.265 km	
	v) Bed slope of tunnel	1 in 486	
	vi) Off take level of link	151.665 m	

	canal	
	vii) FSL at tail end of link canal	101.102 m
	viii) Type of canal	Lined canal, trapezoidal section with bottom corners rounded
	ix) Side slope	Varies from 0.25:1 to 1.5:1
	x) Type of tunnel	Modified horse shoe section of radius 5.0 m
7	Power generation	
	i) Installed capacity	3 x 30 MW
	ii) Standby unit	1 x 30 MW
8	Estimated cost	Rs. 6321 crore
9	B.C. ratio	
	i) Annual benefits	Rs. 18529 lakh
	ii) Annual cost based on apportioned capital cost	Rs. 9938 lakh
	iii) B.C. ratio	1.86
	iii) Internal rate of return(IRR)	14.05%