

POWER GRID CORPORATION OF INDIA LTD.
(A Govt. of India Enterprise)

TECHNICAL SPECIFICATION
FOR
PILE FOUNDATION PACKAGE PL01
FOR
765KV ANGUL-SRIKAKULAM 2ND D/C TRANSMISSION LINE
PART-I ASSOCIATED WITH INTRASTATE TRANSMISSION
SYSTEM FOR “INTER-REGIONAL STRENGTHENING
BETWEEN SR GRID AND ER GRID” THROUGH TBCB ROUTE

VOLUME-II

(This document is meant for the exclusive purpose of bidding against this specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued)

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GENERAL INFORMATION & SCOPE

SECTION – I

1.0 GENERAL

- 1.1 The Pile foundations covered in this specification shall be constructed for 765KV Angul-Srikakulam 2nd D/c Transmission line part-I associated with Intrastate transmission system for “Inter-regional strengthening between SR grid and ER grid” through TBCB Route.

Pile Package	Transmission Line
PL01	Pile foundation Package for 765KV Angul-Srikakulam 2nd D/c Transmission line part-I

- 1.2 The Employer has conducted only a walkover survey of the proposed line route. A detail survey and soil investigation at specific locations of the river crossing sections and other locations along the transmission line route will be carried out by the Employer. The profile of the river crossing, and other relevant sections will be provided to the successful bidder. However, to familiarize themselves with the actual site conditions, constraints, and the scope of work, bidders are required to visit the site for an on-the-spot study of the proposed river crossing route and assess the nature and constraints of the locations before submitting their bids. For this purpose, bidders may contact the address provided below for further details

POWER GRID CORPORATION OF INDIA LTD.
Odisha Projects
Plot no. 4, Unit – 41, Niladri Vihar
Chandrasekharapur, Bhubaneswar-751021
Odisha, INDIA

2.0 SCOPE

- 2.1 The work to be performed under this specification consists of boring in all kinds of soil including weathered rock, fissured rock, hard rock, shale etc., providing and installation of cast-in-situ RCC vertical bored piles of 1200mm/ 900mm diameter, providing all labour, materials, supervision, dewatering, scaffolding, platforms, boring and construction equipments & machineries, tools, tackles and plants, supplies, power, fuel, transportation on land and water, all incidental items not shown or specified but reasonably implied or necessary for successful and timely completion of work including Contractor's supervision in strict accordance with IS Codes, drawings and specifications. The nature of work shall generally involve construction/installation of cast-in-situ RCC vertical bored piles of specified diameter, pile caps, pedestals, tie beam (if required) etc. as per the Employer's construction drawings and also co-ordination with tower erection contractor for setting of stubs / fixing of anchor bolts (as the case may be) for River crossing locations in 765KV Angul-Srikakulam 2nd D/c Transmission line part-I.

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- 2.2 The bidder shall furnish in their bid complete data regarding the method of installation of the pile foundations, complete list of equipments, tools and tackles, rigs, men, materials to be deployed for the work etc.
 - 2.3 The Bidder's offer should be based on the mobilization of at least one no. piling rig for each tower location together with all associated working gangs, tool & tackles etc. (including at least one no. of Rotary Hydraulic drilling rig capable of boring minimum 1200mm diameter piles up-to 40m depth below existing Ground Level with necessary tools/accessories for boring) However, if extra rigs are required to be deployed by the Contractor to match with the project construction schedule, the same shall be deployed without any additional cost to the Employer. The contractor shall execute the complete job as per soil strata actually encountered at the time of construction.
 - 2.4 The Contractor shall be responsible for the soundness of the above pile foundations installed / constructed by them.
 - 2.5 After completion of installation / construction of piles, pile integrity test shall be conducted for each pile by the contractor, in presence of Employer's representative, to establish its soundness. The procedure for conducting of pile integrity test is given briefly at section – II of this Specification. The tentative quantity of tests to be carried out is given in BPS. Bidder shall quote the price accordingly.
 - 2.6 The setting of stub/fixing of foundation anchor bolts (as indicated in the drawing) shall be the responsibility of the Contractor. The contractor shall co-ordinate for this purpose with the contractor for tower package wherever necessary.
 - 2.7 The Bidder shall quote based on the provisional Bill Of Quantities (BOQ) furnished in the Bid Proposal Sheet (B.P.S). No deviation in this respect will be acceptable and any bid quoted based on different Bill of Quantities shall be liable for rejection. However, the payment will be made as per actual quantity executed as per Employer's design & drawing based on the unit rates for items quoted.

The work of pile foundations at river-crossing locations of the 765 kV Angul–Srikakulam 2nd D/c Transmission Line Part-I, associated with the intrastate transmission system for “Inter-regional strengthening between SR and ER grids,” is covered under Pile package PL01 as :

Sl. No.	Package	Tentative locations

1	Pile foundation Package PL01 for 765KV Angul-Srikakulam 2nd D/c Transmission line part-I	Mahanadi River locations: 3 Nos.
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3.0 DESIGN AND DRAWINGS

- 3.1 Employer shall develop the pile foundation design based on the soil investigation reports. The detailed soil investigation shall be carried out by the Employer through line contractor of tower package at the specific river crossing locations finalized after detail survey of proposed river crossings. The construction drawings required for execution of pile foundation shall be given to the successful bidder progressively as per the agreed schedule.