MINUTES OF THE MEETING OF THE EXPENDITURE FINANCE COMMITTEE (E.F.C.) HELD IN THE CONFERENCE ROOM OF THE CHIEF SECRETARY ON 26th September 2018.

A meeting of the Expenditure Finance Committee was held in the Conference Room of the Chief Secretary on 26/09/2018.

The following members were present for the meeting:

1.	Shri. Dharmendra Sharma Chief Secretary	Chairman
2.	Shri. Daulat A Hawaldar Secretary (Finance)	Member
3.	Smt. Nila Mohanan Secretary (Power)	Member
4.	Shri. Michael M. D'Souza Addl. Secretary (Fin-Exp)	Member
5.	Smt. Isha Khosla Special Secretary (Budget)	Member
6.	Shri. N. N. Reddy Chief Electrical Engineer	Member

The following tender was deliberated on;

1. ***Proposal for Survey, Design, Supply, Erection, Testing and Commissioning of 1x100 MVA, 2x63 MVA 220/110/33KV GIS sub-station at Verna along with associated interconnecting 220KV D/C line from Verna sub-station to 220/33KV Cuncolim sub-station and 220KV D/C line from Verna sub-station to Kadamba sub-station. (Estimated Cost ₹.241.1 Crores).***

The existing 110/33KV Verna Substation of capacity 2 x 40 MVA + 1 x 50 MVA catering to major loads of Verna Industrial Estate, MPT, Airport Vasco, Sancoale, Verna, Raia, Fatorda, and surrounding areas is loaded to its peak especially during peak hours. Consequently, accommodation of future/ potential loads in the circuit, due to this system constraints and non-availability of spare power transformation capacity, is not feasible. The loading situation elevated when the M/s Reliance (RSPCL) stalled its generation

facility, after which the Department had to accommodate, shift and cater to the loads which were fed from the Reliance circuit. Load to the extent of 30 MW since 2014 were shifted from the Reliance circuit to the Department circuit, accordingly. The present situation, is that the existing 110/33KV Verna Substation does not have available spare transformation capacity. Consequently, the Department is compelled to impose round the clock load shedding in the areas to maintain balance & stability in the power system especially during peak hours. Industrialists having their units in the area, often conduct meetings to transpire on these restrictions being imposed including occurrences of several power outages and unstable power supply to their units. Industrialists, knowing the limitations in the power availability situation in the area, hesitate to set up their units as their industrial units would desire adequate, affordable and assured power supply and which cannot be met in the present Substation configuration as being already attained to its full capacity utilization. The load growth in the area is approximately, 6% and hence, it has become imperative that the transformation capacity be enhanced to facilitate catering to such future load requirements.

In order to counter this situation, the Department proposes to erect a 220/110/33KV GIS substation at Verna along with the associated link lines comprising of 220KV double circuit line from the new 220/110/33KV GIS Verna Substation to 220/33KV Cuncolim Substation and another from existing Kadamba Substation to the new 220/110/33KV GIS Verna substation. There will be no requirement of land acquisition in this case, as the proposed GIS substation will be accommodated in the adjacent vacant space in the premises of the existing 110/33KV substation at Verna. The work is proposed to be booked under the Budget head Capital outlay on Power projects (4801), Transmission & Distribution (05), other Expenditure (800), erection of 220/110/33KV substation at Verna new (45), Major Works (53). A Load Demand projection based on present load growth in the area of 6% indicates elevation from the present demand of 115MVA to 180 MVA in 10 years period. The 19th Electric Power survey projection (EPS) has also projected a load growth of 6-8% in the State of Goa. It was informed that there is also a proposal for expansion of the Verna Industrial Estate due to potential IT, Pharma units and other LT & HT consumers under phase V & phase VI plans of the Industrial Development Corporation.

A 400KV substation, being setup by the Ministry of Power, Government of India under the TBCB basis at Dharbondara, after fully commissioning would provide alternate, reliable, quality and stable uninterrupted power supply to the New 220/110/33KV GIS substation at Verna as the aforesaid 400KV substation would act as an evacuation and wheeling of power source to the Goa Electricity Grid and which in turn would be an interlink of the Southern Region Grid (SR) to the Western Region Grid (WR) through the Goa Grid at 220 KV level and hence, assured and reliable power supply to the new GIS Verna Substation. The new GIS Verna substation would inturn provide ring feed arrangement to the Goa Electricity Grid and will have main advantage of transmission and wheeling of power either from WR or SR in case of breakdown, shutdown, unscheduled breakdown, preventive maintenance etc of any of the generating stations in future, thus having a provision for supplying stable power in the areas of Verna and within its vicinity.

In view of the above, installation of the new GIS substation at Verna with the associated interlinking 220KV lines would provide stable, assured, reliable, quality and uninterrupted power supply which is a prime requirement for a boost to industrial growth in the area and which in turn, would ultimately, boost the revenue collection figures on upward trend. With reliable and quality supply being maintained on account of upgradation to 220KV level, transmission losses would be considerably reduced and minimized and there would also be sufficient transformation capacity to cater future load requirements. On the basis of present load growth figures to the extent of 6% per annum in the area, the projected load for a period of 15 years is calculated which is annexed at Annexure I and which indicates that future load requirements are met with ease.

The work will be carried out by competitive bidding/ turnkey project through e-tendering mode by appointing Project Management Consultant (PMC) as per the guidelines of JERC. Accordingly, the Department has appointed M/s PFCCL as PMC consultant on obtaining the required approvals from the Government.

The Members intimated that due to fund flow issues especially for Capex projects already sanctioned in the present financial year and in addition, to accommodate for spill over expenditure from previous years sanctioned works including provision for operation

and maintenance expenditure which is time bound, it would be difficult to arrange for the required funds (Rs.15 Crores) for this year earmarked by the Department to the full extent required and it was therefore, requested to take up this work in phases, splitting the works accordingly, so that fund flow to the sanctioned work would be regulated in the best possible way without any hindrance to the progress of the works as being of essential nature.

The Chief Electrical Engineer informed that the requirement to undertake these works have come to such a prime stage, due to accumulation and stagnation of these works over the past periods and is now an essential requirement for the stability of the power system.

The Members also suggested to take a call for the process of a revision in the rate of Electricity Duty which was last revised on 1st June 2012 which would pool in additional revenue for supporting the infrastructure development works being undertaken by the Department.

The work is to be carried out by competitive bidding/ turnkey project through e-tendering mode and in a phase wise manner. The works would be completed within 90 months inclusive of monsoons from the date of placing of work order and completion of all departmental formalities.

The sufficient capacity after commissioning of the GIS 220/110/33KV new Substation at Verna, would result in minimization of cost and transmission loss and in turn would easily cater to the growing power demand and in turn provide stability in power supply. Improvement in the quality of supply, improvement of voltage level, stability of power supply due to available capacity, load shedding / peak load restriction all lifted would be the beneficial features. Based on the present load demand frequency and load growth, the revenue forecast calculated forecasts that the entire cost of this project would be recovered in a period of 5-6 years. All these qualities and benefits will

result in generation of more revenue to the department and in turn stability to the power line network.

The EFC committee members took the note of above facts and explanation/ justification as given by the Chief Electrical Engineer and agreed to confer approval to the proposal.

(N. N. Reddy)
Chief Electrical Engineer
Member

(Isher Khosla)
Special Secretary (Budget)
Member

(Micheal M D'Souza)
Additional Secretary (Fin-Exp)
Member

(Nila Mohanan)
Secretary (Power)
Member

((Daulat A. Hawaldar)
Secretary (Finance)
Member

(Dharmendra Sharma)
Chief Secretary
Chairman

ANNEXURE I

Projected Load for a period from 2018, considering New additional anticipated load on proposed upgradation, GIS 220/110/33KV,2x63MVA at Verna.

	Year	present insatlled Power Trasformer capacity 130MVA, taken max. of 85% loading	Anticipeted loading after upgradation with additional 2x63MVA=126MVA at 33kV level		Remark
	2018	110MVA max.			New load of 5-6% is considered
1	2019	110MVA max.	110.0		
2	2020	110MVA max.	130.0		Here sanctioned load of 20 is added
3	2021	110MVA max.	135.0		(Maximum of 5MVA increased
4	2022	110MVA max.	141.0		considered every year)
5	2023	110MVA max.	146.0		
6	2024	110MVA max.	151.0		
7	2025	110MVA max.	156.0		
8	2026	110MVA max.	161.0		
9	2027	110MVA max.	166.0		
10	2028	110MVA max.	171.0		
11	2029	110MVA max.	176.0		
12	2030	110MVA max.	181.0		
13	2031	110MVA max.	186.0		
14	2032	110MVA max.	191.0		
15	2033	110MVA max.	196.0		
			Say 200MVA		

Say 200 MVA

Note :- Based on the projected figures, the proposed upgradation 220/110/33KV 2x60MVA=126MVA is sufficient to cater the Loads Demand for a period of 15 years.