competitive price on the maintenance and repair work. The reduction cost will be on the payment of labour salaries where the TNB workshop charges ninety-one percent more on labour.

Others

On the overhead line patrolling work, the usage of vehicles will not be needed as the contractors will provide the vehicles. Other indirect cost saving would be on the efficiency of the new policy and work method.

9.0 OUTSOURCING THE MAINTENANCE WORK

The routine maintenance work can be done by any company provided that they have experienced engineers and technicians who have the knowledge of workings of the transmission equipment. As the maintenance of the equipment requires following the instructions in the operation and maintenance manual, there will be a maintenance checklist to ensure this is strictly adhere to. There are a few companies that can do the maintenance work for the transmission equipment.

However, there are a few problems which need to be solved. They are as follows:-

1) There will be excess staff left in the department. Staff retrenchment is not the TNB policy. Having excess staff means underutilization of manpower.
2) Some of the jobs are highly technical. Staff training will be costly and time consuming. Therefore, not 100% of the work can be privatised.

3) The equipment is very expensive and any mistakes made will be very costly. As such, the work must be properly supervised.

4) As there are only a few companies that can do the job, they can create a cartel among themselves and fix their own price. The disadvantage will be on TNB.

It is recommended that a strict procedure and regulation be enforced if the job be privatised to outsiders. The main considerations should be based on the financial, quality of work, time period and staffing of such operations.

Another important area is the maintenance contract. These are:-

a) The tender process

b) Types of contracts

These are explained in detail below.

9.1 The Tender Process

A tender is an invitation by the client to interested parties to submit their proposals to carry out the work. There is no obligation on the client to accept the lowest tender or any tender. This can vary if the tender documents specify the method by which the successful tender will be selected. However, the following need to be considered when tendering the maintenance work. They are:-

Risk Allocation - with maintenance work on transmission systems, which means overhauls on the equipment, there is an unknown amount of
unidentified refurbishment work that has to be done. Therefore, it is necessary to implement the appropriate form of policy for the work.

Quality Of Service - with maintenance work, clients usually require the major equipment to be returned to service, trouble free for periods varying from 1-5 years. To achieve this, there must be a pre-selection of tenders to ensure only proven quality contractors are invited to tender. In prequalifying contractors consideration should be given to:-

- Financial capability of the company.
- Engineering expertise/support.
- Project and maintenance management systems.
- Reputation of the company.
- Industrial relations record.
- Safety
- Company resources plant and workshop.
- Workforce skills.

After in-depth prequalification, the number of tenderers should be limited to 3 or 4. It will be costly in incurring the costs of receiving tenders from unsuitable contractors.

Security Of The Resource - the department should look to provide long-term maintenance work which will ensure the contractor can recruit and retain the level of skill required for the work and encourage them to invest in the equipment to carry out the work. Continuity of work will encourage the contractor to invest money in:
• Plant
• Retention of skilled staff
• Training
• Management systems

9.2 Types Of Contracts

Lump Sum Contract: where the contractor takes all the risks. This option can be expensive and subject to intense variation claims.

Straight Schedule Rate: where the client takes all the risk and there is no incentive for productivity by the contractor. This will lead to significant overruns in both time and money.

Lump Sum and Reimbursable Contract: where the parties share the financial risk and the incentive remains for the contractor to finish the work as early as possible.

9.3 Evaluation On Outsourcing The Maintenance Work

This proposal will result in excess staff in the department. Not all the jobs can be privatised and there is a need for proper supervision or it would be underutilising the manpower, wastage of staff’s experience, and lack of efficiency in the department. The proposal to privatise out the maintenance department should remain but with the choice of privatising out only some of the jobs. The reasons for privatising some of the work would be on the qualitative, efficiency and financial aspects as follows:-