

**BANGLADESH RURAL ELECTRIFICATION BOARD**

**PBS INSTRUCTION: 100-50**

**PBS HOT LINE WORK OPERATIONS**

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**PBS INSTRUCTION 100-50**

Approval Date: 26/06/1990  
Revision Date : 19/20/2020

**SUBJECT: PBS HOT LINE WORK OPERATIONS**

**I. PURPOSE**

The purpose of this instruction is to specify the operating procedures and the requirements for safe and proper hot line work in terms of personnel and tools required for various jobs. **THIS POLICY INSTRUCTION SHOULD BE REFERRED TO FREQUENTLY AS A BASIS OF AGREEMENT BETWEEN ALL PARTIES AS TO THE FEASIBILITY OF PERFORMING VARIOUS JOBS ON PBS FACILITIES WITHOUT DE-ENERGIZING LINE.** PBS Instruction 100-49, "PBS Hot Line Work Administration" should be referred to for details concerning the administrative provisions that are required for the successful implementation of hot line work in a PBS system.

**II. DEFINITION OF HOT LINE WORK**

Briefly stated hot line work is "**WORK ON ELECTRICAL LINES WITHOUT DE-ENERGIZING**". For the purposes of this policy instruction this refers to any kind of maintenance, construction or operations on energized lines beyond simple energization or de-energization. This work may be performed on 33 KV, 11 KV, 0.4 KV and 0.23 KV lines that are owned and operated by a PBS.

**III. PROCEDURES FOR HOT LINE WORK**

Every job in the PBS that is done by hot line work methods must be approved by the

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DGM(Tech-HQ)/ AGM (O&M) and consented to by the Lead Lineman for the crew that will perform the work.

Prior to any hot line work the job site must be visited and the job thoroughly planned by either the AGM (O&M) or the Junior Engineer/Assistant Junior Engineer and the Lead Lineman of the hot stick crew that will do the work. On the basis of the visit a determination will be made as to whether the job by hot line methods is feasible or not. If a positive decision is made a Service Order (**BREB Form 339**) will be written that describes the work to be performed. The Service Order will clearly state the portion of the work that is to be performed hot. This may be all or only some part of the total job. The signature of the Lead Lineman for the crew that will do the work must appear on the Service Order and this will constitute his consent to do the work as specified. The signature of the DGM(Tech-HQ)/ AGM(O&M) on the Service Order constitutes his/her approval of the hot line work. The DGM(Tech-HQ)/ AGM (O&M) must not sign the Service Order until the Lead Lineman has signed it.

Staking sheets and other documents that may be associated with the work should be processed in the normal manner. Daily work reports and other Work order documents will also be processed as usual.

#### IV. REQUIREMENTS FOR STORAGE OF HOT LINE TOOLS AND EQUIPMENT

It is very important that the tools and equipment purchased and intended for hot line work

be kept clean, dry and protected from scratches or other surface damage.

In order to guarantee that proper storage arrangements are made, each PBS shall provide

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and maintain a dry shelter for storage of hot line tools and equipment. The shelter will be arranged by a PBS as soon as tools are acquired by that PBS. Specifications for the storage shelter will be provided by the System Operations Directorate.

## V. REQUIREMENTS FOR HOT LINE WORK AS PER THE ACCOMPANYING CHART

This chart specifies the exact tools and personnel required to carry out various jobs on energized facilities. It should be used by the O&M personnel to help to determine the feasibility of performing any given job by hot line methods. An effort has been made to include all likely jobs that may be done by hot line methods. However, if a case arises that is not included in the chart then the job closest to it in the list should be used for a reference.

Virtually all work required in a PBS can be performed safely by hot line crews **IF THE PROPER TOOLS AND TRAINED PERSONNEL ARE AVAILABLE**. If the required tools and personnel are not available when and where work must be performed, that work must be done by the traditional "de-energize and temporary ground" method. If these simple principles are adhered to hot line work can be carried out safely. If these principles are not adhered to, a dangerous situation may arise and any personnel making decisions contrary to these principles will be held responsible for that situation.

The left-most columns in the chart contain a list of types of personnel and a list of tools by BREB Item number and description. Each remaining column of each page contains information related to the job that is specified by the number at the head of the column. The names and numbers of each job for a page are given at the top of that page. Below each job number one can locate the minimal numbers of personnel of each type and the

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minimal quantities of tools that are required to perform the job with hot line methods. Tool numbers from TL-415 to 477 are special hot line tools that are not commonly available in the PBS systems. Other numbers are for normal lineman tools that all PBS systems should have. It is assumed that all tools to be used in hot line work are in good, safe, working condition. **TOOLS THAT ARE BROKEN OR WORN OUT MUST NEVER BE USED FOR HOT LINE WORK.** The list does not include climbing tools or other personal tools or ordinary tools that may be needed.

Note that only the minimum requirements of tools and personnel are listed in the chart. An actual job may require more but never less resources than the specifications in the chart. Actual jobs may involve several of the jobs listed here. Special circumstances may also call for special resources.

Under the transformer jobs (**Jobs 39-53**) only Transformer Hot Stick Linemen are specified. Of course, fully trained Hot Stick Linemen can do these jobs also. Likewise "Others?" have been designated along with the minimum three Transformer Hot Stick Linemen for these jobs. The "Others?" could be day laborers or regular linemen or Hot Stick Linemen depending on the exact nature of the work and the availability of personnel.

Wherever a question mark ("?") appears it implies a choice and the discretion of the involved personnel will be required. For example, for many advanced jobs the hot line tool trailer may be taken to the site when road conditions and transportation means are available. It is almost always possible, however, to carry the required hot line tools in bags to the work site. This is true even for major jobs like pole changes. For this reason a question mark is given next to TL-441 "Hot Stick Trailer" for many jobs.

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