Subject: NEMA TS1 Traffic Controller Cabinet Rehabilitation/Modernization Program

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Bulletin Number: TE-2018-03
Bulletin Type: New Policy and Procedure
Effective Date: Immediately

Audience
Ministry Managers, Electrical Services; all holders of the Electrical and Traffic Engineering Manual, Traffic Controller Assembly Manual and Traffic Controller Design Manual; all Project Managers and Traffic Engineers; all Design Consultants

Standards Affected
Electrical & Traffic Engineering Manual
Traffic Controller Assembly Manual
Traffic Controller Design Manual

Background: The existing NEMA TS1 Traffic Control System, consisting of the TS1 Traffic Controller Mainframe and Conflict Monitor Unit (CMU) have been in operation for over 20 years. With the constant demand to optimize the Provincial highway intersections to accommodate the increasing traffic volumes, it is necessary to upgrade the limiting TS1 technology to the current NEMA TS2 standard. The upgrade will facilitate the capacity increase and allow for future integration of new and advanced traffic technologies.

Recent reports from the Electrical Maintenance Contractors (EMCs) have also indicated an increasing failure rate of the existing TS1 control systems. Maintenance of the aging TS1 inventory has become challenging due to the component obsolescence. The continued use of the TS1 system poses a growing concern for the traveling public, as component failures may lead to intermittent traffic signal operations.

Policy: The Ministry’s NEMA TS1 traffic controller cabinets (M and S model) currently installed throughout the province, will undergo rehabilitation/modernization procedures to phase-out the existing TS1 traffic control systems.

Effective immediately;

1. The NEMA TS1 traffic controller cabinets, will be retrofitted with a TS2, Type-2 traffic controller mainframe to replace the existing TS1 mainframe.

2. A new 16 Channel Malfunction Management Unit (MMU) will be installed to replace the existing LNM series CMU.

3. Priority and selection of applicable intersections will be coordinated between the Electrical Service Managers and respective EMCs.

4. Cabinets selected for upgrades will be completed as program funding allows.
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