DATE: October 7, 2004

TO: Region Engineers
    Region Delivery Engineers
    Region Development Engineers
    TSC Managers
    Resident/Project Engineers
    Region Construction Engineers
    Region Traffic and Safety Engineers
    Region Maintenance Engineers

FROM: Larry E. Tibbits
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       John C. Friend
       Engineer of Delivery

SUBJECT: Bureau of Highway Instructional Memorandum 2004-24
         Dark Signals Due to Power Outage

To ensure consistent treatment of dark signalized intersections (signal not operating due to local area power outage), the following is a clarification of MDOT policy.

Current maintenance guidelines on dark signals (last revised in 1993) states “An investigation determining that a general power failure is the cause of a problem requires no further action. Placement of portable generators as a temporary power source should not be undertaken. Possible damage to signal equipment may occur. Temporary stop signs may be placed at the intersection and the controller switched to flash operation. After power is restored, the intersection should be switched back to normal operation.”

Upon notification of a dark signal, the appropriate region’s electrician (or authorized equivalent) should contact the power company to determine if the dark signal is because of a local power outage. If it is determined the power outage is the cause of the dark signal, the following options are available and listed in their preferred order:

1. No action taken - traffic shall proceed as per the Michigan Vehicle Code, Section 257.649, Right-of-Way; Rules; Violations as Civil Infraction.
2. Traffic control is provided by uniformed police officers at the sole discretion and responsibility of the police enforcement agency in a manner determined solely by the police enforcement agency.
3. At signalized intersections under MDOT’s jurisdiction (which includes local streets which intersect with trunkline routes), placement of temporary stop signs must be approved by authorized MDOT region/TSC operations staff or by authorized staff of direct maintenance garages or special crews facilities. Reimbursement for work activity by a contract agency would be made.

If a temporary stop sign is placed, the signal must be switched to flash operation with care given to which approaches will be stopping and that they match the colors of the flashing signal once power is restored. Usually under flash operation, the major approaches will flash yellow and the minor approaches flash red. Activating the flash operation requires the electrician maintaining the intersection (or authorized personnel as approved by the appropriate region’s electrician) to switch the traffic signal. Without this change in operation, the traffic signal will return to stop and go operation within seconds after power is restored, which could cause conflicts between the signal and any temporary signage (conflicting green or yellow indications with a stop sign for the same approach). If temporary stop signs are placed, they shall be continuously monitored by the local agency to insure removal upon restoration of power. At that time, the signal must be switched back to the normal stop and go mode of operation by MDOT forces or authorized personnel. If it cannot be ensured that the signal will come back in the appropriate flash mode in conjunction with the temporary traffic control, stop signs shall not be placed at the intersection.

As was stated earlier, placement of a portable generator as a temporary power source should not be undertaken. However, contract maintaining agencies that have extensive knowledge and experience with traffic signals can request prior written approval from MDOT to use generators. As part of the request, the maintaining agency will need to identify how they will prioritize generator placement during area wide power outages. The request will then need to be reviewed by appropriate MDOT personnel before authorization is given.

Chief Operations Officer

Engineer of Delivery

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