

ACTIVATING/DEACTIVATING A SIGNAL

Standard Specifications 2565.3W: ACTIVATING SIGNALS GUIDELINES

Activating a traffic signal requires careful planning and coordination between the Project Engineer, the Contractor and the District Traffic Office. Cooperation between these three groups is essential to ensure a safe and efficient activation of the traffic signal. The following guidelines should be followed:



Prior to activating the signal, the Contractor shall make a functional test to demonstrate to the Engineer that each and every component part of the traffic signal functions as intended. The traffic signal shall not be placed in operation until all the required field tests have been completed and accepted.

Traffic signal system turn-on should not be scheduled on Fridays or before a holiday because of possible malfunction of the new traffic signal.

Prior to activating a signal system, the Contractor shall notify the Engineer within a timeframe as specified in the Contract. The signal system cannot be put in flash or made operational, unless authorized by, and in the presence of the Engineer.



Prior to activating the signal system, the Contractor shall remove the bags from all the signal indications.

Mn/DOT personnel shall place the signal system into operation unless otherwise authorized by the Engineer.



The Contractor shall aim the vehicle and pedestrian signal heads as directed by the Engineer.

All appropriate signs shall be installed. Conflicting signs (for example, stop signs) shall be covered or removed.

TURN-ON PROCEDURE

Although the Engineer is responsible for the following work, it is often done by District Traffic Office representatives.

- While the signal is in all red flash, use the “Stop Time Override Switch” to run the controller phasing to phases 2 and 6. These phases are usually assigned to the major approaches.



- Stop traffic flow from all approaches (with the help of the Contractor).

- Turn the signal system on. Allow traffic on the major approach to go, hold the traffic on the minor approaches until they get a green light. Note the time so that it can be entered in the log book and included in the Turn-On Letter.





- Wait for the signal indications of the major street to turn red and their traffic to stop. Do not allow cross street traffic to move until they get a green light.

- Check that all vehicle indications are working properly through several cycles.

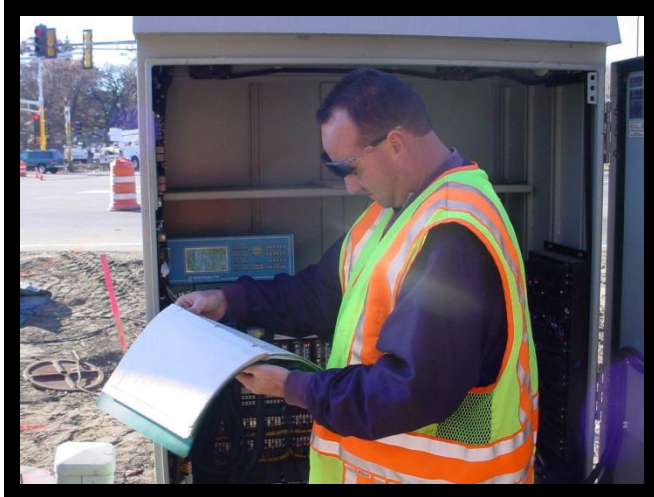


- Check that all pedestrian push buttons and indications are working properly.

- Observe all the phases in a cycle to ensure that each phase has the correct timing.



- When a signal is turned on, District Traffic Office personnel will observe its operation in the A.M. and P.M. peak periods, as well as off peak operation. This will continue until they are satisfied with the operation.



The following personnel should be present when a signal system is activated:

- The Project Engineer (or their representative)
- The Contractor (with the appropriate equipment and personnel)
- The City police (if necessary)

- Mn/DOT’s Electrical Services Unit personnel (if necessary)
- The District Traffic Engineer (or their representative)



Please note that Mn/DOT personnel may choose to operate new the signal system in a “flashing” mode for a few days before turning the signal system to normal operation. This is not done in all Mn/DOT Districts.



Standard Specifications define TURN-ON date as: the time when the complete traffic control signal and lighting systems meet all installation and operational requirements of the Contract and is placed in automatic operation.

TURN-ON LETTER

After a signal system is activated, the District Traffic Office is responsible for sending a memorandum of notification (turn-on letter) to each of the following:

- The City
- The County
- The Power Company
- The State Patrol
- The Project Engineer
- The Emergency Operations Officer, Mn/DOT Truck Center
- The Electrical Services Unit
- The Office of Traffic, Security, and Operations (C.O. Traffic)

The memorandum should include the following:

- State Project Number
- Intersection I.D. number
- The location of the signal
- Date and time of signal activation
- A listing of maintenance responsibilities (who is responsible for what)
- The name of the power company
- The name of the project engineer
- The meter address
- Dates of warranties affecting the signal
- The vertical clearances of any objects suspended over the roadway

DATE:			
TO:	Addressees		
FROM:			
PHONE:			
SUBJECT: SIGNAL TURN-ON			
LOCATION:	T.H. at	S.P.:#	T.E. :#
	System I.D.:#		
TURN-ON DATE			
Signal placed in flash Date:			
Automatic in operation Date:			
Luminaire turn on Date: (No) , 250 watt H.P.S.			
Date Old System Turned Off:			
AGREEMENTS			
In force: #	E.V.P.:#	Ends:	
Warranty Period Begins:			
OPERATION NOTES			
Operation Type:	Controller Type:	Indication Type:	
Preemption Type:			
MAINTENANCE RESPONSIBILITY			
Effective Date:	Relamp Signal Maintenance:	Meter Address:	
Cabinet:	Luminaire Maintenance:	District Priority Code:	
E.V.P.:	Cleaning & Painting:	Phone Line to Cabinet(Y/N):	
Hardware:	Power: Signal:	Power: Luminaires:	
Interconnect:	Rail Road Preemption:	Rail Road Co.:	
Knockdown:	Phone Co.:	Phone Drop Address:	
Special Note:			
SM = State Maintenance	CM = County Maintenance	MM = City Maintenance	
CO = Contractor Maintenance	RC = County Reimburses State	RM = City Reimburses State	
PM = Payable - State Pays City	UT = Utility Maintenance	PC = Payable - State Pays County	
NA = Not Applicable	OT = Other Maintenance	RO =Other Reimburses State	
ADDRESSEES			
City:	State Patrol:		
County:	Power Company:		
Signal Design:	Project Engineer:		
Traffic Engineering C.O.	Traffic Studies		
* District Permits Office	District Control Section File		
* Electrical Services Section	*Signal Operation File		
*Admin. Truck Center-Permits: Mendota Heights			
*Overhead Clearance - See Attachment			
		Version 10/23/01	

DEACTIVATING A SIGNAL



Prior to turning a signal system off, the Contractor shall notify the Engineer within a timeframe as specified in the Contract. The signal system cannot be put in flash or deactivated except by the Mn/DOT personnel, unless authorized by, and in the presence of the Engineer.



Turning a signal system off should be conducted with the same care and planning used for a turn on. The following procedure should be followed:

Make sure that no pedestrians or vehicles are in the intersection.

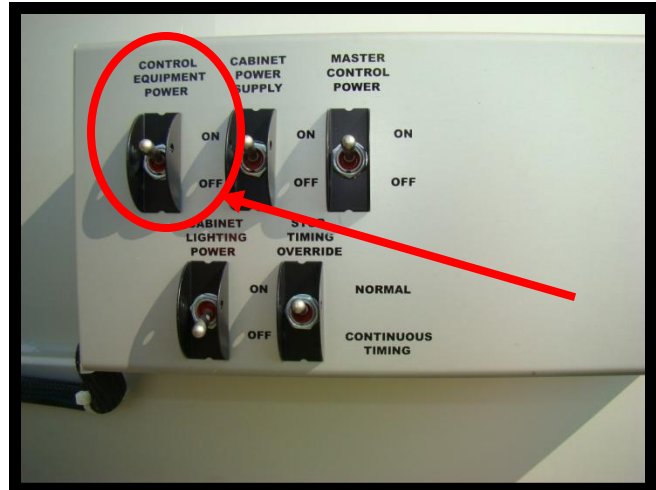
Wait until the major street traffic is stopped by a red light. Wait until the minor street indications change from yellow to red then place the intersection in flash when traffic on the minor street permits.



Make sure all the appropriate signing is in-place before the signal system is turned off.

The signal system shall be turned to flash.

Turn the signal system off.
Record the time in the log book.

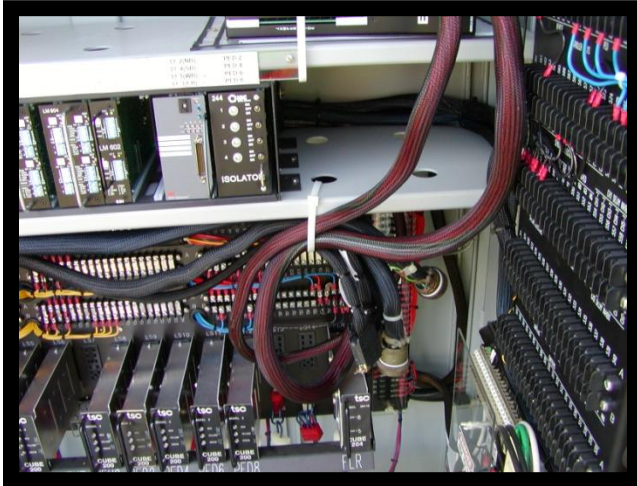


Turn the power from the service equipment off.

Signal Removal and Salvage

The person responsible for removing the equipment shall, using tape and a water proof marker, label all the control equipment with the date, time and intersection location. Using the same method, label the electric meter.

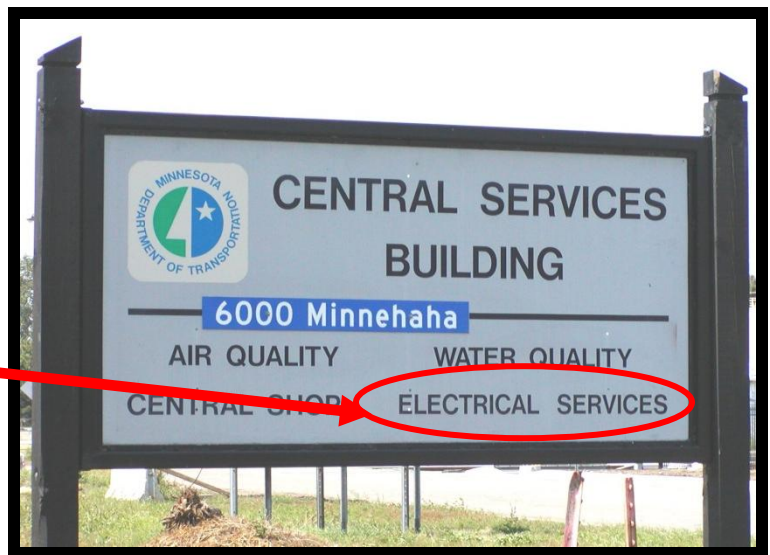




Secure all the connectors and electronic equipment that is not being removed with tape or nylon tie wraps.

If the cabinet is to be removed from its foundation, it shall be lifted using the holes near the roof of the shell (or the lifting ears). The cabinet shall be transported in an upright position and protected from dents and scratches.

The Contractor shall transport all the salvaged equipment to the locations specified in the contract.



After a signal system is deactivated, the District Traffic Office is responsible for sending a memorandum of notification (turn-off letter) to the same people as the turn-on letter.