Traffic Signal Activation
& Electrical Service Disconnect/Reconnect Process

I) **Purpose:** The purpose of this document is to establish the early coordination between project stakeholders for the energizing of the Traffic Signal's Service Cabinet (TSC) for New Signals and Signal Modification projects prior to the Traffic Signal Activation event.

II) Project Stakeholders:

- *Project Contractor*
- *PW – Construction Inspector*
- *PW – Electrical Team*
- *SECI – Inspection Team*
- *DOT – Infrastructure Maintenance (IM)*
- *DOT – Signal Activation Coordinator*

III) New Traffic Signal Installation

Conditions: A new Service Cabinet & Service Point are constructed at the traffic signal intersection.

With advance notice, DOT IM will modify the key lock on the TSC to revert to the old standard key for Contractor access. Following completion of the work, DOT IM will reinstall the Abloy lock on the TSC.

The following procedures shall be incorporated for energizing the new Service Cabinet prior to the Traffic Signal Activation event:

a. Contractor shall install the new TSC per approved plans.
b. Once the new TSC has been installed and is ready for inspection, the PW Construction Inspector (PW-CI) shall send SECI the Inspection Request Form (IRF) for the meter release as soon as possible.
c. If the TSC inspection passes, SECI will release the meter and the PW-CI shall submit the meter release to the Connect Order Processing Team in the PW-THS Electrical Section. The Connect Order Processing Team will provide the connect order to the electric service provider.
    - If TSC inspection fails, repeat Steps a-b.
d. Contractor will coordinate with the electric service provider to set the meter and energize the new TSC.
e. Once the new TSC has been energized, the PW-CI shall be notified.
f. Contractor may proceed with the Signal Walkthrough & Shutdown/Activation process for activating the new traffic signal.

IV) Signal Modification Projects

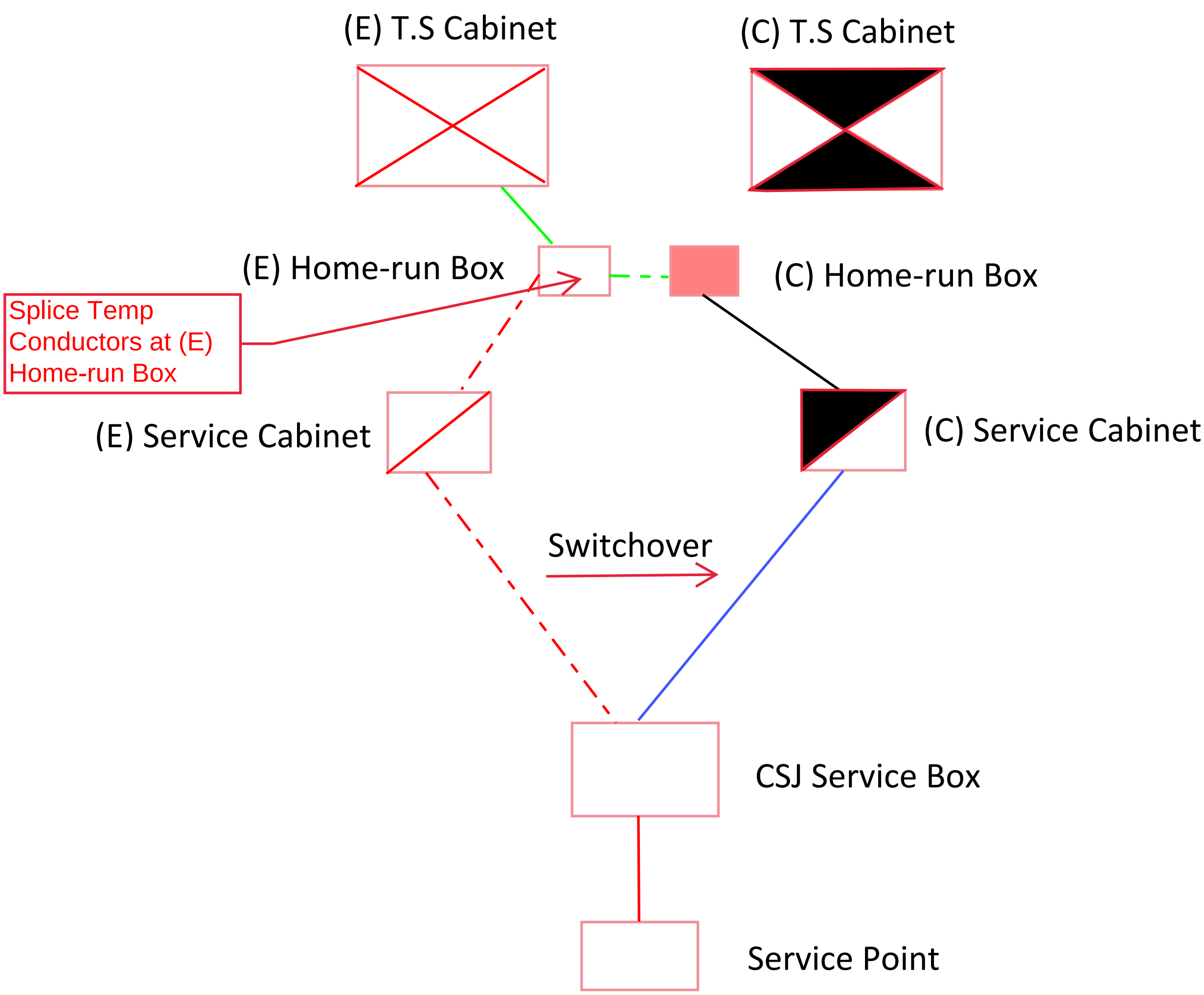
<u>Conditions</u>: A new TSC is constructed while an existing TSC and service point are already established at the traffic signal intersection.

With advance notice, DOT IM will modify the key lock on the TSC to revert to the old standard key for Contractor access. Following completion of the work, DOT IM will reinstall the Abloy lock on the TSC.

For a Traffic Signal Modification, the following procedures shall be incorporated for the switchover of the old TSC to the new TSC <u>prior</u> the Traffic Signal Activation event:

a. Contractor shall install the new TSC and new home run box per approved plans. The contractor shall provide a proposed plan, for review and approval by the City, for the construction of the temporary conduit run and connection.See Figure 1: Using Existing Service Point for T.S Mods Only, for schematic reference.
b. Once the new TSC has been installed and is ready for inspection, the PW Construction Inspector (PW-CI) shall send SECI the Inspection Request Form (IRF) for the meter release inspection as soon as possible.
c. If the TSC inspection passes, SECI will release the meter and the PW-CI shall submit the meter release to the Connect Order Processing Team in the PW-THS Electrical Section. The Connect Order Processing Team will provide the connect order to the electric service provider.
    - If TSC inspection fails, repeat Steps a-c.
d. Once the electric service provider acknowledges the connect order request, electric service provider will coordinate and confirm a date with the Contractor to perform their scope of work at the project site.
e. Day of the electric service provider's scope of work to switchover and energize the new TSC, <u>the Contractor may be responsible for providing Traffic Control at the intersection during the "outage event" at the intersection with the PW-CI present</u>.
    - This work will not require the Traffic Signal Shutdown staff as this work will be treated as part of the electric service provider's typical "outage events".
    - For intersections located at a high sensitivity location [e.g. adjacent to City Hall, schools, etc.]– the electric service provider will need to provide a <u>Pure Sign Wave Inverter generator</u> to keep the traffic signal energized and operational. *(DOT & PW will determine sensitivity of the intersection for this item application).*
    - If the generator is required, the PW-CI shall request support by DOT IM for the connection of the generator to the existing controller cabinet day of work.
f. The electric service provider will set the meter, disconnect the old TSC, connect and energize the new TSC, and ***<u>the contractor shall connect the newly energized service cabinet to the existing traffic signal system via the constructed temporary connection, spliced at the existing "homerun box"</u>***.
g. The PW-CI and Contractor will verify the existing traffic signal system is fully functional and properly operational after the electric service provider's work is completed.
h. With the new TSC energized, the Contractor may proceed with the Signal Walkthrough & Shutdown/Activation process when ready.
    - During the permanent Signal Activation, temporary conductors and materials shall be removed per Article 590 of National Electrical Code (NEC).

Figure 1: Using Existing Service Point for T.S Mods Only
(For Schematic Purposes Only)



LEGEND

Temp. Conduit Run with 1 #6 Controller Feeder, 1 #6 Controller Neutral, and #8 equipment grounding conductor (*Splice at Existing Home-run Box)*

Existing Conduit with with 3-3/0 cables from electric service provider

Existing Conduit to be AB

New 2 1/2" Conduit with 3-3/0 cables from electric service provider

Existing Conduit with existing TS conductors.

Permanent 2" Conduit with 1 #6 Controller feeder, 1 #6 Controller Neutral, and #8 equipment grounding conductor