City and County of San Francisco Department of Building Inspection



London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

INFORMATION SHEET

No. E-01 DATE March 25, 2019 2 SUBJECT : Electrical Plans / Title 24 Review TITLE Routing and Submittal Requirements for New High Rise Buildings, New Low Rise Residential Buildings with 50 units or more, New Low Rise Non-Residential Buildings, Non-Residential Tenant Improvements, and Electrical **Systems Alterations** PURPOSE 2 This information sheet clarifies which permits are exempt from electrical plan review, and which permits must be routed to SFDBI's Electrical sub-section (MECH-E) of the Mechanical-Energy group for review. The Electrical Plan Review scope includes verifying compliance with the 2016 California Energy Code, the 2016 San Francisco Electrical Code, and the 2016 San Francisco Green Building Standards Code. **REFERENCE** : 2016 California Energy Code 2016 San Francisco Electrical Code 2016 San Francisco Green Building Standards Code • SFDBI Information Sheets: G-01, G-02, M-01 through M-06 SFDBI Administrative Bulletin 047 (AB-047)

DISCUSSION :

(A) Electrical Plan Review Procedure

Electrical plans submitted to SFDBI Mechanical/Electrical (MECH-E) shall be reviewed for compliance with the 2016 California Energy Code, 2016 San Francisco Electrical Code, and the 2016 San Francisco Green Building Standards Code, where applicable prior to Building Permit Issuance.

Permits for new high-rise buildings (per CBC definition), new low-rise residential buildings with 50 units or more, new low rise non-residential buildings, non-residential tenant improvements, and electrical systems alterations (e.g. electric service upgrades, EV charger installations, generator upgrades, fire pump replacements, etc.) that are submitted or routed to SFDBI MECH-E are subject to both Title 24 review and Electrical Plan review. Permits of this type shall include all applicable Title 24 Compliance Certificates on the plans in addition to all required electrical drawings. Plans submitted online for solar/PV review shall be reviewed by SFDBI Solar Plan Review.

(B) Electrical Drawing Requirements

Technical Services Division 1660 Mission Street – San Francisco CA 94103 Office (415) 558-6088 – FAX (415) 558-6401 Website: www.sfgov.org/dbi

- 1) Scaled plans. The smallest allowable scale shall be 1/8" = 1'- 0", and the smallest allowable sheet size shall be 11" x 17."
- 2) Legible plans. Plans shall include 1/8" minimum text height.
- 3) All electrical plans shall be stamped and signed by a Registered Electrical Engineer, Licensed Architect in the State of California, or by a C-10 Licensed Contractor (see SFDBI Information Sheet G-01).
- 4) For high-rise construction, life safety systems shall be designed and submitted by a Registered Electrical Engineer and shall include a compliance or non-infringement statement per SFDBI Administrative Bulletin 047 (AB-047).
- 5) Where permits are submitted for non-residential tenant improvements or electrical system alterations, submit scaled electrical plans indicating all equipment locations, conduit routing, and electrical calculations for review.

In order to demonstrate compliance with the 2016 California Energy Code (see SFDBI Information Sheets M-01 through M-06) and the 2016 Green Building Standards Code, where applicable, submit the following on the electrical plans for review:

• All applicable Title 24 Compliance Certificates, including:

NRCC-LTI-01-E, Nonresidential Interior Lighting NRCC-LTI-02-E, Nonresidential Mandatory Lighting Controls NRCC-LTI-03-E, Nonresidential Allowed Lighting Wattage NRCC-LTI-04-E, Tailored Method NRCC-LTI-05-E, Line Voltage Track Lighting Worksheet NRCC-LTI-06-E, Lighting Existing Conditions NRCC-ELC-01-E, Electrical Power Distribution

All Title 24 Compliance Forms shall be complete with all pertinent information, calculations, and all required signatures.

- Single line diagram complete with all electrical ratings of all equipment (e.g. equipment name, voltage, ampere, phase, interrupting rating, etc.).
- Panel schedules complete with load calculations. In addition, submit electrical service load calculations for review.
- Lighting and power plans complete with mandatory control locations and locations of all proposed electrical equipment. Include corresponding panel schedules.
- A completed SFDBI Title 24 Energy Inspection Checklist on the electrical plans (Electrical/Lighting). See SFDBI Information Sheet M-04, pages 4 and 5 for more information. In addition, an 11"x17" hard copy of the completed checklist shall be included during submission for SFDBI use.

Tom C. Hui, S.E., C.B.O., Director Department of Building Inspection

This Information Sheet is subject to modification at any time. For most current version, visit our website at http://www.sfdbi.org