



General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 33-41 Union Street Central Maine Power Substation		
Total Square Footage of Proposed Structure/Area 832, 1561, 630, 293 square-feet		Square Footage of Lot 21,196.3 square-feet
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# 031-I-39	Applicant * must be owner, Lessee or Buyer* Name Central Maine Power Co. Address 83 Edison Drive City, State & Zip Augusta, ME 04336	Telephone: 626-9564
Lessee/DBA (If Applicable) N/A	Owner (if different from Applicant) Name N/A Address City, State & Zip	Cost Of Work: \$ <u>550,350</u> C of O Fee: \$ _____ Total Fee: \$ <u>5,523.50</u>
Current legal use (i.e. single family) <u>electrical substation</u> If vacant, what was the previous use? _____ Proposed Specific use: <u>electrical substation</u> Is property part of a subdivision? <u>NO</u> If yes, please name _____ Project description: replace 11/12kV and 34kV switchgear buildings, relocate 4 transformers, add a firewall, add resistors, and demolish both existing switchgear buildings.		
Contractor's name: <u>to be determined</u> Address: _____ City, State & Zip _____ gerry.boivin@cmpco.com Telephone: _____ Who should we contact when the permit is ready: <u>Gerry Boivin</u> Telephone: <u>626-9564</u> Mailing address: <u>Central Maine Power, 83 Edison Drive, Augusta, ME 04336</u>		

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature:  Date: 8/14/13

This is not a permit; you may not commence ANY work until the permit is issued



Certificate of Design Application

From Designer: TRC Engineers LLC, 14 Gabriel Drive, Augusta, ME 04330
 Date: August 2013
 Job Name: Union Street Substation, Central Maine Power Co.
 Address of Construction: 33-41 Union St, Portland, ME

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year IBC 2009 Use Group Classification (s) U
 Type of Construction Steel siding and roof and concrete slab foundation
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC No
 Is the Structure mixed use? No If yes, separated or non separated or non separated (section 302.3) _____
 Supervisory alarm System? Monitored remotely by CMP Geotechnical/Soils report required? (See Section 1802.2) Completed

Structural Design Calculations

_____ Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

_____	Live load reduction
<u>45 psf</u>	Roof <i>live</i> loads (1603.1.2, 1607.11)
_____	Roof snow loads (1603.7.3, 1608)
<u>100 psf</u>	Ground snow load, P_g (1608.2)
<u>92.4 psf</u>	If $P_g > 10$ psf, flat-roof snow load P_f
<u>1</u>	If $P_g > 10$ psf, snow exposure factor, C_e
<u>1.2</u>	If $P_g > 10$ psf, snow load importance factor, I_s
<u>1.1</u>	Roof thermal factor, C_t (1608.4)
<u>1</u>	Sloped roof snowload, P_s (1608.4)
<u>D</u>	Seismic design category (1616.3)
<u>*</u>	Basic seismic force resisting system (1617.6.2)
<u>6.5</u>	Response modification coefficient, R and
<u>4</u>	deflection amplification factor C_{dI} (1617.6.2)
<u>**</u>	Analysis procedure (1616.6, 1617.5)
<u>4,193 lbs</u>	Design base shear (1617.4, 1617.5.1)

Wind loads (1603.1.4, 1609)

_____	Design option utilized (1609.1.1, 1609.6)
<u>125</u>	Basic wind speed (1809.3)
<u>1.15</u>	Building category and wind importance Factor, I_w table 1604.5, 1609.5)
<u>C</u>	Wind exposure category (1609.4)
<u>0.18</u>	Internal pressure coefficient (ASCE 7)
_____	Component and cladding pressures (1609.1.1, 1609.6.2.2)
<u>21.3 psf</u>	Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

_____	Design option utilized (1614.1)
<u>D</u>	Seismic use group ("Category")
<u>38.2</u>	Spectral response coefficients, S_D & S_{D1} (1615.1)
<u>D</u>	Site class (1615.1.5)

Flood loads (1803.1.6, 1612)

<u>N/A</u>	Flood Hazard area (1612.3)
<u>104.75</u>	Elevation of structure

Other loads

<u>200 lbs</u>	Concentrated loads (1607.4)
<u>380 plf</u>	Partition loads (1607.5)
_____	Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)

* Reinforced steel switchgear cabinets

** Equivalent lateral force procedure



New Commercial Permit Application Checklist

All of the following information is required and must be submitted. Checking off each item as you prepare your application package will ensure your package is complete and will help to expedite the permitting process.

One (1) complete Set of construction drawings must include:

Note: Construction documents for costs in excess of \$50,000.00 must be prepared by a Design Professional and bear their seal.

- Cross sections w/framing details
- Detail of any new walls or permanent partitions
- Floor plans and elevations
- Window and door schedules
- Foundation plans with rebar specifications and required drainage and damp proofing (if applicable)
- Detail egress requirements and fire separations
- Insulation R-factors of walls, ceilings, floors and U-factors of windows as per the IECC 2003
- Complete the Accessibility Certificate and The Certificate of Design
- A statement of special inspections as required per the IBC 2003
- N/A Complete electrical and plumbing layout.
- Mechanical drawings for any specialized equipment such as furnaces, chimneys, gas equipment, HVAC equipment (air handling) or other types of work that may require special review.
- Reduced plans or electronic files in PDF format are required if originals are larger than 11" x 17".
- N/A Per State Fire Marshall, all new bathrooms must be ADA compliant.

Separate permits are required for internal & external plumbing, HVAC and electrical installations.

Nine (9) copies of the minor (< 10,000 sf) or major (> 10,000 sf) site plan application is required that includes: Minor alteration permit has been issued

- A stamped boundary survey to scale showing north arrow, zoning district and setbacks to a scale of $\geq 1'' = 20'$ on paper $\geq 11'' \times 17''$
- The shape and dimension of the lot, footprint of the proposed structure and the distance from the actual property lines. Photocopies of the plat or hand draw footprints not to scale will not be accepted.
- Location and dimensions of parking areas and driveways, street spaces and building frontage
- Finish floor or sill elevation (based on mean sea level datum)
- Location and size of both existing utilities in the street and the proposed utilities serving the building
- Existing and proposed grade contours
- Silt fence (erosion control) locations

Fire Department requirements.

The following shall be submitted on a separate sheet:

- Name, address and phone number of applicant **and** the project architect.
- Proposed use of structure (NFPA and IBC classification)
- Square footage of proposed structure (total and per story)
- Existing and proposed fire protection of structure.
- Separate plans shall be submitted for
 - a) Suppression system
 - b) Detection System (separate permit is required)
- A separate Life Safety Plan must include:
 - a) Fire resistance ratings of all means of egress
 - b) Travel distance from most remote point to exit discharge
 - c) Location of any required fire extinguishers
 - d) Location of emergency lighting
 - e) Location of exit signs
 - f) NFPA 101 code summary
- Elevators shall be sized to fit an 80" x 24" stretcher.

For questions on Fire Department requirements call the Fire Prevention Officer at (207) 874-8405.

Please submit all of the information outlined in this application checklist. If the application is incomplete, the application may be refused.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

Permit Fee: \$30.00 for the first \$1000.00 construction cost, \$10.00 per additional \$1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.



Accessibility Building Code Certificate

Designer: TRC Engineers, LLC

Address of Project: 33-41 Union Street, Portland

Nature of Project: Switchgear building 11.5 kV and 12kV

Switchgear building 34.5 kV

Four transformer foundations and firewall

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

Signature: _____

Title: _____

Firm: _____

Address: _____

Phone: _____

(SEAL)

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Certificate of Design

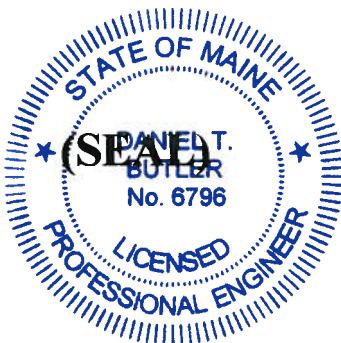
Date: August 2013

From: TRC Engineers, LLC

These plans and / or specifications covering construction work on:

Central Maine Power Co., Union Street Substation

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the **2003 International Building Code** and local amendments.
IBC 2009



Signature: [Handwritten Signature]

Title: MGR, CIVIL & TRANSMISSION ENG Dept

Firm: TRC

Address: 249 WESTERN AVE
AUGUSTA, ME 04330

Phone: 207-621-7061

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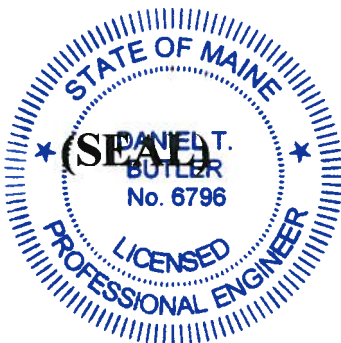
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