

Electric Service Connection Process pepco



WBC Joint Utility Seminar 2019

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Program Agenda

- Typical process for a new large commercial service connection within Pepco:
 - On-line application process for new and upgraded electric service connections
 - Developer's Manual and Standards availability on Pepco's website
 - Approved Switchgear List
 - Typical Design & Construction Duration
- Pepco Service Transformer/Vault Options
- Option for Customer to Build Pepco Structural Facilities in Public Space

Typical Process for a New Commercial Service Connection Project

Initiation



II. Design



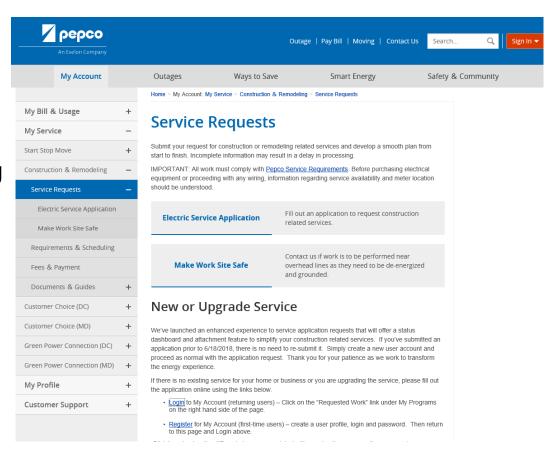
III. Pre-Construction Inspections

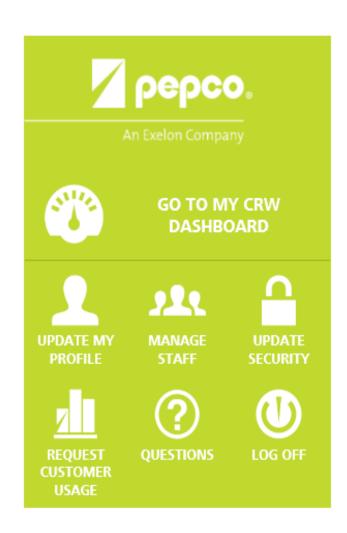


IV. Construction

- Initiation:
- Customer submits on-line Application for Electric Service Form
- Or Visit
 WWW.PEPCO.COM
 My Account
 Construction and Remodeling
 Builders and Inspectors
 Service Requests
 Electric Service Application

Login or First Time User





LOGIN

Please login to complete your request.

Username

CONTINUE

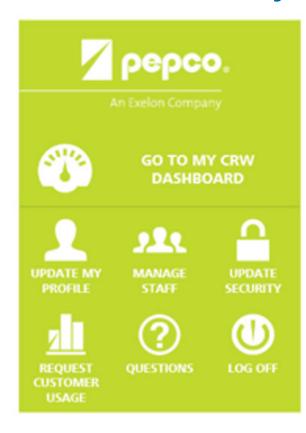
DON'T HAVE AN ACCOUNT?

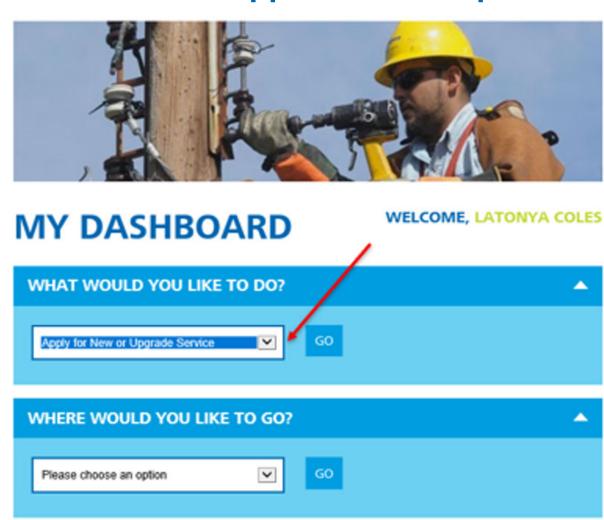
SIGN UP NOW

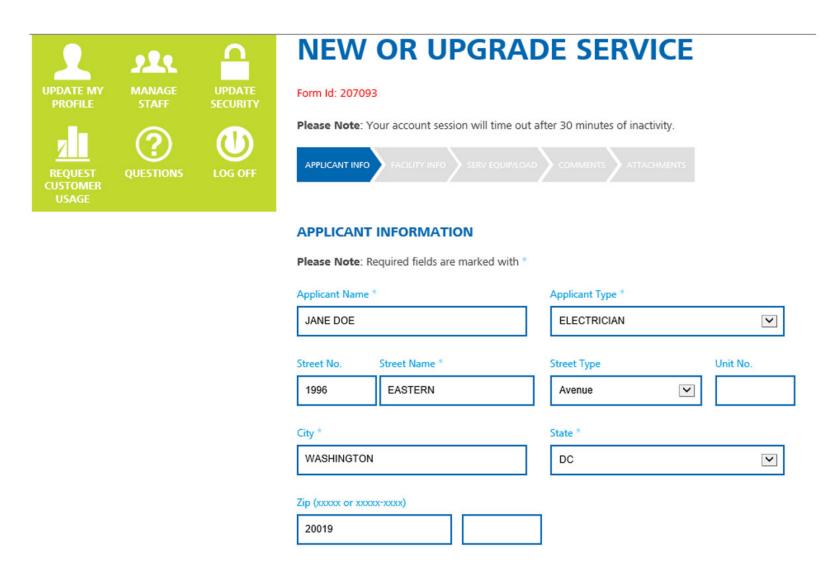
Sign In Help?

Forgot Username?

Forgot Password?







PRIMARY SITE USE *		
O Residential O Sub-Division Commercial / Multi-Use O Industrial		
O Other		
Store Total Conditioned Sq. Footage Number of Units		
Restaurant Total Conditioned Sq. Footage Number of Units		
☐ Office Total Conditioned Sq. Footage		
☐ Warehouse Total Conditioned Sq. Footage Number of Units		
Condo Total Conditioned Sq. Footage Number of Units		
Apartment Total Conditioned Sq. Footage Number of Units		
Other Total Conditioned Sq. Footage Number of Units		

LOAD INFORMATION

Note: All fields are required and must contain a numerical value. Please enter "0" if a field is not applicable.

Lighting (kW) *	Air Conditioning (tons) *
Electric Heating Pump (tons) *	Electric Resistance Heating (kW) *
Water Heating (kW) *	Back-up Resistance Heating (kW) *
Number of Elevators *	Elevators (Total kW) *
Total Motors (HP) *	Largest Motor (HP) *
Miscellaneous (kW) *	

Return completed application to Pepco at:

District of Columbia

Pepco 3400 Benning Road NE Mailstop: 2B59FF Washington, DC 20019 Phone: (202) 331-6237 Fax: (202) 388-2721

Maryland - Montgomery County

Pepco Rockville Service Center 201 West Gude Drive Mailstop: 2RCK22 Rockville, MD 20850 Phone: (301) 670-8700 Fax: (301) 670-8718

Maryland - Prince George's County

Pepco Forestville Service Center 8300 Old Marlboro Pike Mailstop: 2FVC67 Forestville, MD 20772 Phone: (301) 967-5800 Fax: (301) 967-5820



Applicant's Name

Date

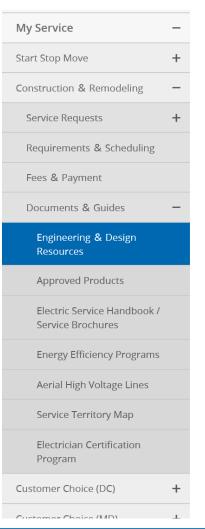
- Application for Electric Service must contain:
 - Project Location and Contact Information
 - Conditioned Space & Type of Use Square Feet and/or Number of Units
 - Service Equipment Information Type, Size & Voltage
 - Connected Load Information Including Largest Motor
 - In-Service Date, Construction Start and Completion Date
- Some Required Information will vary with Type of Application
 - Example: Heavy up and New Service have different required information.

- Pepco to send Response to Proposed Class of Service (Typically Within 4 Weeks)
 - Class of Service e.g. 265/460V, 3 Phase, 4 Wire, 60 hertz
 - Available Fault Current and Starting Current Limitation
 - Point of Service Pepco's preferred service location
 - Customer owned structural facility requirements
 - Service cable to be provided and installed by Pepco
 - Specifies appropriate Pepco Standards and Conditions
- After receiving the Proposed Class of Service from Pepco, a meeting with Pepco's design staff is highly recommended.
- Pepco request Design consultant, Owner's representative

- Customer submissions
 - Structural drawings for customer-built facilities located on private property
 - Building plans (site and utility, and 2nd basement through 2nd floor)
 - Pepco's approval of customer's structural drawings will be in writing and include:
 - Required Pepco inspection information including contact information for obtaining structural facility inspections
 - List of Stock Materials available for purchase from Pepco's approved vendors
 - Pepco design of the service connection will start when the required drawings are received <u>and</u> approved.

See Commercial Design Manual and Standard Drawings on Pepco Website:

https://www.pepco.com/MyAccount/MyService/Pages/EngineeringDesignResources.aspx



Engineering & Design Resources

General Terms and Conditions for Furnishing Electric Service

- District of Columbia
- Maryland

Design and Construction Manuals

Click here to view the Commercial Developer Manual

Click here to view the Requirements and Specifications for High Voltage Customer Built Facilities Manual

Customer Design Drawings

Drawing Number	Title
CD.001	DUCT LINE CONFIGURATIONS, DIMENSIONS, AND NOTES
CD.002	TYPICAL 3000 AMPERE SWITCHGEAR (SERVICE ENTRANCE) DRAWING TO BE PREPARED BY CUSTOMER
CD.003	METER INSTALLATION FOR 265/460 VOLT 200 AMPERE OR LESS
CD.004	<u>DIMENSIONS & MOUNTING FOR NEUTRAL BUS IN TROUGH FOR MULTIPLE METERING</u>
CD.005	CLEARANCES FOR CABLE TERMINATIONS IN MULTI-METER BANKS
CD.006	PAD MOUNT TRANSFORMER MAXIMUM DIMENSIONS. GUIDE FOR LOCATING TRANSFORMER AND PROTECTIVE SCREEN INFORMATION
CD.007	CONDUIT BENDS UNDER PAD
CD.008	INSTALLATION OF SPLICE BOX AND DIMENSIONS

II. <u>Design Phases:</u>

- Preliminary Engineering
- Field Investigation
- Temp service requirement Follow the same process
- Final Engineering
 - For services over 1200 amps, the customer must submit plan and profile views of the electric room for Pepco's review and approval.
 - Use Pepco's pre-approved switchgear, presented on Pepco's web-site:
 https://www.pepco.com/MyAccount/MyService/Pages/ApprovedProducts.aspx>
 For projects with multiple service terminations, the customers must submit a load breakdown per termination.
- Estimating
 - The customer is notified of the Service Connection Fee
- Permits
- Final Assembly of Construction Package

Total Project Design Duration – Typically 4 months

Typical Process for a New Commercial Service Connection Project – Pre-Construction Inspection

III. <u>Pre-Construction Inspections:</u>

Prior to scheduling Construction, the job site is inspected by Pepco to verify:

- Approved switchgear is mounted securely, including meter sockets and meter panels
- Structural facilities for electric service (i.e., manholes, conduit, transformer pads, poles, etc.) are properly installed on private property and/or in public space by agreement with Pepco
- Job site is cleared of debris and building material for Pepco access

All customer built conduit, transformer pads, manholes, and customer installed poles must be inspected by Pepco prior to any backfilling and/or pouring concrete.

Pepco requires a 48-hour notification to schedule inspection in DC, 1 week notification in Maryland.

IV. Construction:

- Pepco crews are scheduled upon:
 - Certification of customer built facilities
 - Payment of Service Connection Fee
 - Availability of appropriate permits
- Pepco construction time is dependent upon the scope of work, such as:
 - Number of transformers
 - Number of manholes
 - Distance and quantity of underground cable to be installed
 - Energizing new facilities depend on system conditions.

The new service will be energized when Pepco has received approval from the appropriate electrical inspectors' office and the service connection fee is paid.

Total Construction Duration – Typically 2 Months

Pepco Service Transformer/Vault Options

Pepco provides the following transformer installation options with prior approval from Engineering:

Company Plan:

Pepco equipment in private property closest to Pepco's available source

Preferred Options:

- 1. Pepco equipment in alternate location within the property
- 2. Pepco equipment in non-vehicle accessible Public Space (DC Public Parking Area, Sidewalk, or Planting area) adjacent to property with natural ventilation
- Pepco equipment in non-vehicle accessible Public Space (DC Public Parking Area, Sidewalk, or Planting area) adjacent to property with forced ventilation thru parking garage
- 4. Pepco equipment in non-vehicle accessible Public Space (DC Public Parking Area, Sidewalk, or Planting area) adjacent to property with air conditioning units

Options 1 thru 4 will be subject to additional Company vs. Customer plan in the service cost.

Example of a Grated Manhole Roof with Customer Installed Brick Pavers



Option for Customer to Build Pepco Conduit Facilities in Public Space

Customers may request to build Pepco's service connection structural facilities in public space.

Benefits:

- Reduces Service Connection Fees
- Improves Coordination of Work

Pepco Procedure Requirements:

- Execute formal Agreement with Pepco
- Use approved Pepco contractor. Customer must identify contractor and obtain approval prior to executing Agreement.
- Participate in Pre-Construction meeting 2 weeks prior to starting work.
- Build facilities per Pepco drawing under Pepco's permit.
- Permanent roadway resurfacing is typically excluded

Pepco Electric Service Connection Process

Key Message:

- Typical Pepco connection process: 6 to 8 months pending scope of work and type of service
- Start early in the project life cycle to work with Pepco on planning electric service connections for large commercial projects.

