



Electric Service Connection Process



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

I. Initiation



II. Design



III. Pre-Construction Inspections



IV. Construction

Typical Process for a New Commercial Service Connection Project

I. 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


The screenshot shows the Pepco website interface. At the top, there is a blue header with the Pepco logo and navigation links for 'Outage', 'Pay Bill', 'Moving', and 'Contact Us'. A search bar and a 'Sign In' button are also present. Below the header is a secondary navigation bar with 'My Account', 'Outages', 'Ways to Save', 'Smart Energy', and 'Safety & Community'. The main content area is titled 'Service Requests' and includes a sidebar on the left with a list of 'My Account' options. The sidebar options are: My Bill & Usage (+), My Service (-), Start Stop Move (+), Construction & Remodeling (-), Service Requests (-), Electric Service Application, Make Work Site Safe, Requirements & Scheduling, Fees & Payment, Documents & Guides (+), Customer Choice (DC) (+), Customer Choice (MD) (+), Green Power Connection (DC) (+), Green Power Connection (MD) (+), My Profile (+), and Customer Support (+). The main content area has a breadcrumb trail: Home > My Account > My Service > Construction & Remodeling > Service Requests. The 'Service Requests' section includes a description, an 'IMPORTANT' note about service requirements, and two main options: 'Electric Service Application' and 'Make Work Site Safe'. The 'Electric Service Application' option includes a description and a 'New or Upgrade Service' section with instructions for returning users and first-time users.


Typical Process for a New Commercial Service Connection Project - Initiation - Application Sample


Page 1





An Exelon Company


 GO TO MY CRW DASHBOARD


 UPDATE MY PROFILE

 MANAGE STAFF

 UPDATE SECURITY

 REQUEST CUSTOMER USAGE

 QUESTIONS

 LOG OFF

LOGIN

Please login to complete your request.

Username

CONTINUE

DON'T HAVE AN ACCOUNT?

SIGN UP NOW

Sign In Help?

Forgot [Username?](#)

Forgot [Password?](#)

Typical Process for a New Commercial Service Connection Project - Initiation - Application Sample



pepco.
An Exelon Company

GO TO MY CRW DASHBOARD

UPDATE MY PROFILE MANAGE STAFF UPDATE SECURITY

REQUEST CUSTOMER USAGE QUESTIONS LOG OFF



MY DASHBOARD

WELCOME, LATONYA COLES

WHAT WOULD YOU LIKE TO DO?

Apply for New or Upgrade Service


GO

WHERE WOULD YOU LIKE TO GO?


Please choose an option

GO


Typical Process for a New Commercial Service Connection Project - Initiation - Application Sample




UPDATE MY PROFILE




MANAGE STAFF




UPDATE SECURITY



REQUEST CUSTOMER USAGE



QUESTIONS



LOG OFF

Typical Process for a New Commercial Service Connection Project - Initiation - Application Sample

PRIMARY SITE USE *

- Residential Sub-Division Commercial /Multi-Use Industrial
- Other
-

<input type="checkbox"/> Store	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>
<input type="checkbox"/> Restaurant	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>
<input type="checkbox"/> Office	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>
<input type="checkbox"/> Warehouse	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>
<input type="checkbox"/> Condo	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>
<input type="checkbox"/> Apartment	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>
<input type="checkbox"/> Other	Total Conditioned Sq. Footage	<input type="text"/>	Number of Units	<input type="text"/>

Typical Process for a New Commercial Service Connection Project - Initiation - Application Sample

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) *

Typical Process for a New Commercial Service Connection Project - Initiation - Application Sample


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

For Office Use Only	
Form ID	207050
WR Number	4926686



Applicant's Name _____

Date _____

Typical Process for a New Commercial Service Connection Project - Initiation

- 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.

Typical Process for a New Commercial Service Connection Project - Initiation

- 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

Typical Process for a New Commercial Service Connection Project - Initiation

- 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 and approved.

Typical Process for a New Commercial Service Connection Project - Initiation

- See Commercial Design Manual and Standard Drawings on Pepco Website: <https://www.pepco.com/MyAccount/MyService/Pages/EngineeringDesignResources.aspx>

My Service	-
Start Stop Move	+
Construction & Remodeling	-
Service Requests	+
Requirements & Scheduling	
Fees & Payment	
Documents & Guides	-
Engineering & Design Resources	
Approved Products	
Electric Service Handbook / Service Brochures	
Energy Efficiency Programs	
Aerial High Voltage Lines	
Service Territory Map	
Electrician Certification Program	
Customer Choice (DC)	+
Customer Choice (MD)	+

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	DIMENSIONS & MOUNTING FOR NEUTRAL BUS IN TROUGH FOR MULTIPLE METERING
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

Typical Process for a New Commercial Service Connection Project – Design

II. Design Phases:

- 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. Pre-Construction Inspections:

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.

Typical Process for a New Commercial Service Connection Project - Construction

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
3. 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.

