<https://www.centurylink.com/wholesale/pcat/hivoltprotect.html>

## High Voltage Protection - V8.0

[History Log](https://www.centurylink.com/wholesale/downloads/2017/170130/HL_High_Voltage_Protection_V8.doc)

### Product Description

All CenturyLink services that extend to designated high voltage (HV) environments are required to have high voltage protection (HVP). HVP devices may be provided by you, the end-user, or may be requested from CenturyLink.

High Voltage Protection (HVP) is intended to:

* Minimize electrical hazards to personnel engaged in construction, operation, maintenance and use of telecommunications service
* Limit electrical damage to telecommunications equipment, cable and wire facilities, and customer equipment
* Provide service continuity and integrity of telecommunications transmissions

High voltage environments are any premises where hazardous voltages of 1000V peak-asymmetrical or greater appear on serving facilities due to Ground Potential Rise (GPR) and/or induction caused by faults in electric power systems located on the end-user premises. HVP is designed to isolate or neutralize the hazardous voltages. High voltage environments include certain:

* Power company sites, including sub-stations, transformers, and poles
* Government installations
* Mines, dams, or other industries supplying their own power
* PCS or Cellular sites located at power transmission line towers

**Options for Service**

The High Voltage Protection (HVP) options available are:

* CenturyLink provided
* Customer provided

### Availability

High Voltage Protection (HVP) is available where facilities exist throughout [CenturyLink QC.](https://www.centurylink.com/wholesale/pcat/territory.html)

#### Terms and Conditions

High Voltage Protection (HVP) is required at customer premises and at CenturyLink central offices whenever the fault-produced GPR/induction equals or exceeds 1000V peak-asymmetrical.

High Voltage Protection (HVP) may be provided by you, the end-user, or may be requested from CenturyLink.

At the customer's request, CenturyLink shall provide any required high voltage protection at the customer's premises and, if necessary, at the Company's CO at rates and charges as set forth in the tariff, following guidelines outlined in Technical Publication 77321. The Company will inspect and verify the protection when service is established at new or existing customer locations, and at future times as deemed necessary during changes, rearrangements or maintenance.

**Identifying a High Voltage Location**

There are a number of ways in which the need for High Voltage Protection (HVP) can be identified. No matter how the high voltage area is identified, the procedure is the same.

* You would advise and/or provide the information.
* CenturyLink contacts you to advise you that the location requires high voltage protection after the order has been submitted.
* When the end-user name is a substation or power utility company.

**CenturyLink Responsibility**

CenturyLink, working in conjunction with the customer, shall determine the proper methods of protection required to achieve the objectives, see the [Description section](https://www.centurylink.com/wholesale/pcat/hivoltprotect.html#desc). The method of protection for every service in a cable shall be coordinated by CenturyLink to be compatible with the protection provided for the most critically important service in that cable.

#### Technical Publications

Technical characteristics, including Network Channel /Network Channel Interface (NC/NCI™) codes, are described in Technical Publication, [Special High Voltage Protection](http://centurylink.com/techpub/77321/77321.pdf), 77321.

### Pricing

#### Rate Structure

Monthly charges for HV environments include the standard rate for the intended service, plus, an additional HV charge for the HV equipment.

**CenturyLink Provided HVP**

Recurring charges for HVP may consist of the following:

* Central Office Power
* HVP Equipment

Nonrecurring HVP charges that may consist of the following:

* Installation
* Environmental cabinet
* Special Construction

**Customer Provider HVP**

With this option, the customer provides all equipment requirements for HVP and follows all CenturyLink guidelines to ensure safety to CenturyLink installation and maintenance personnel.

Nonrecurring HVP charges that may consist of the following:

* Environmental cabinet
* Special Construction

#### Rates

Rates and/or applicable discounts are available in Exhibit A or the specific rate sheet in your Interconnection or Resale Agreement.

#### Tariffs, Regulations, and Policies

Tariffs, regulations and policies are located in the state specific [Tariffs/Catalogs/Price Lists](https://www.centurylink.com/aboutus/legal/tariff-library.html).

### Implementation

#### Product Prerequisites

If you are a new CLEC and are ready to do business with CenturyLink, view [Getting Started as a Facility-Based CLEC](https://www.centurylink.com/wholesale/clecs/clec_index.html). If you are an existing CLEC wishing to amend your Interconnection Agreement or Customer Questionnaire, additional information is located in the [Interconnection Agreement](https://www.centurylink.com/wholesale/clecs/negotiations.html).

#### Pre-Ordering

**Customer Responsibilities**

It is the responsibility of the customer to provide CenturyLink with the complete the [RG31-0048 - Design Information for Power Industry Channels form](https://www.centurylink.com/wholesale/pcat/wireless/forms/designinfopowerindchannel.html) and return it to the appropriate Electrical Protection Engineer.

The following information is required to be populated on the form:

* Service locations
* Ground Potential Rise (GPR) fault data
* Service type
* Service classification
* High Voltage Protection (HVP) service option
* Proposed terminal equipment
* Channel type (e.g., UG type circuit)

When one customer extends a circuit to a high voltage environment which belongs to another customer (e.g., a governmental agency terminating at an electric company's power plant), installation personnel may discuss the need for HVP with either customer. It may be necessary for the customers to discuss HVP requirements with each other in order to provide complete information to CenturyLink. HVP is only effective if all services terminating at a customer location are protected. One customer's delayed installation of HVP may impact installation of other customers' services.

Anytime a customer wishes to change any of the above information, a revised [RG31-0048 - Design Information for Power Industry Channels form](https://www.centurylink.com/wholesale/pcat/wireless/forms/designinfopowerindchannel.html) is required.

The completed form should be sent to your [CenturyLink Service Manager](https://www.centurylink.com/wholesale/clecs/accountmanagers.html) who will forward it the Electrical Protection Engineer (EPE) for the state where the service will be located.

Your [CenturyLink Service Manager](https://www.centurylink.com/wholesale/clecs/accountmanagers.html) will assist you with any questions about the RG31-0048 form.

#### Ordering

To request HVP or to identify an existing HVP site, use the following guidelines.

**Local Service Request (LSR)**

High Voltage Protection (HVP) service requests are submitted by marking the LSR for manual handling and include High Voltage Protection as a notation in the Remarks Section.

If you are submitting a service request where HVP is provided by you or the end-user, you will need to identify this in the Remarks section as High Voltage Protection (HVP) Customer Provided.  
  
If you are submitting a service request where you want HVP provided by CenturyLink you will need to identify this in the remarks section as requesting High Voltage Protection (HVP) CenturyLink Provided.

Service requests should be placed using [EASE-LSR Extensible Markup Language (XML)](https://ease.lumen.com) or [EASE-LSR Graphical User Interface (GUI)](https://ease-lsr.lumen.com/).

If HVP is identified after the service request has been submitted, or the CenturyLink order has been issued, a SUP will be required, up to and including a request for a due date change due to Customer requirements in providing HVP.

**Access Service Request (ASR)**

High Voltage Protection (HVP) service requests are submitted by marking the High Voltage Protection field on the Access Service Ordering Guidelines (ASOG) form. Field entry requirements are described in the [Access Service Request (ASR) Forms](https://www.centurylink.com/wholesale/forms/asr.html).

For new requests, only one RG31-0048 form needs to be submitted per location (e.g. if five circuits are ordered on the same location, only one form is needed).

For existing HVP locations where CenturyLink has an RG31-0048 form on file, if it is more than two years old, a new one is required. CenturyLink will contact the EPE and if the EPE confirms that a current form is not on file, CenturyLink will request the form or the electrical protection information. CenturyLink will consider the service request invalid until a response is received from the EPE that the requirement for the form or electrical protection information has been satisfied.

If HVP is identified after the service request has been submitted, or the CenturyLink order has been issued, a SUP will be required, up to and including a request for a due date change due to Customer requirements in providing HVP.

If you are unable to ascertain that a current form is on file (e.g. can't reach the EPE), you may request that the property owner send the form. The property owner request will not be valid until a response is received from the EPE that the requirement for the form has been satisfied.

#### Provisioning and Installation

General provisioning and installation activities are described in the [Provisioning and Installation Overview](https://www.centurylink.com/wholesale/clecs/provisioning.html).

#### Maintenance and Repair

General maintenance and repair activities are described in the [Maintenance and Repair Overview](https://www.centurylink.com/wholesale/clecs/maintenance.html).

#### Billing

~~Customer Records and Information System (CRIS) billing is described in~~[~~Billing Information - Customer Records and Information System (CRIS)~~](https://www.centurylink.com/wholesale/clecs/cris.html)~~.~~ Ensemble is the new billing system for customers. For questions about the bill, please follow the instructions on the reverse side of each billing statement.

The Ensemble bill is described in [Billing Information – Ensemble](https://www.centurylink.com/wholesale/clecs/ensemble.html).

Carrier Access Billing System (CABS) billing is described in [Billing Information - Carrier Access Billing System (CABS)](https://www.centurylink.com/wholesale/clecs/cabs.html). .

### Training

**Local CenturyLink 101 "Doing Business With CenturyLink"**

* This introductory web-based training course is designed to teach the Local CLEC and Local Reseller how to do business with CenturyLink. It will provide a general overview of products and services, CenturyLink billing and support systems, processes for submitting service requests, reports, and web resource access information. [~~Click here to learn more about this course and to register~~](https://www.centurylink.com/wholesale/training/wbt_desc_lq101.html)~~.~~ [Click here to learn more about this Training.](https://www.centurylink.com/wholesale/training/wbt_desc_lq101.html)

View additional CenturyLink courses by clicking on  ~~Course~~[Training Catalog](https://www.centurylink.com/wholesale/training/coursecatalog.html).

### Contacts

CenturyLink contact information is located in [Wholesale Customer Contacts](https://www.centurylink.com/wholesale/clecs/customercontacts.html).

### Frequently Asked Questions

This section is currently being compiled based on your feedback.

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