

# Emergency shut-down

## Notification of emergency shut-down

## Swissgrid control centre 0800 00 45 45

Information to be reported:

- Name of person reporting?
- Location of incident (municipality/canton)?
- Line route?
- Pylon number (next pylon)?
- What happened?
- Own telephone number (for call-backs)

## Process for an emergency shut-down

1. Disconnection
2. Secure substations against restart (max. 90 min)
3. Swissgrid on-call service at damage location (max. 120 min)
4. Damage location released by Swissgrid on-call service

## Summon Swissgrid on-call service

- Ladder setup! Use of an aerial rescue vehicle near a high-voltage line
- Flying sparks
- Fire under the line
- Car accident! Other rescue activities under the line



The line must be considered live until it has been checked for the absence of voltage and earthed on site by the Swissgrid on-call service.

→ **Safety instructions, see following page**

## High voltage disrupted

### Discharge voltage pattern

Discharge voltage patterns arise when a conductor is in contact with the ground or if a machine is in contact with a live part.

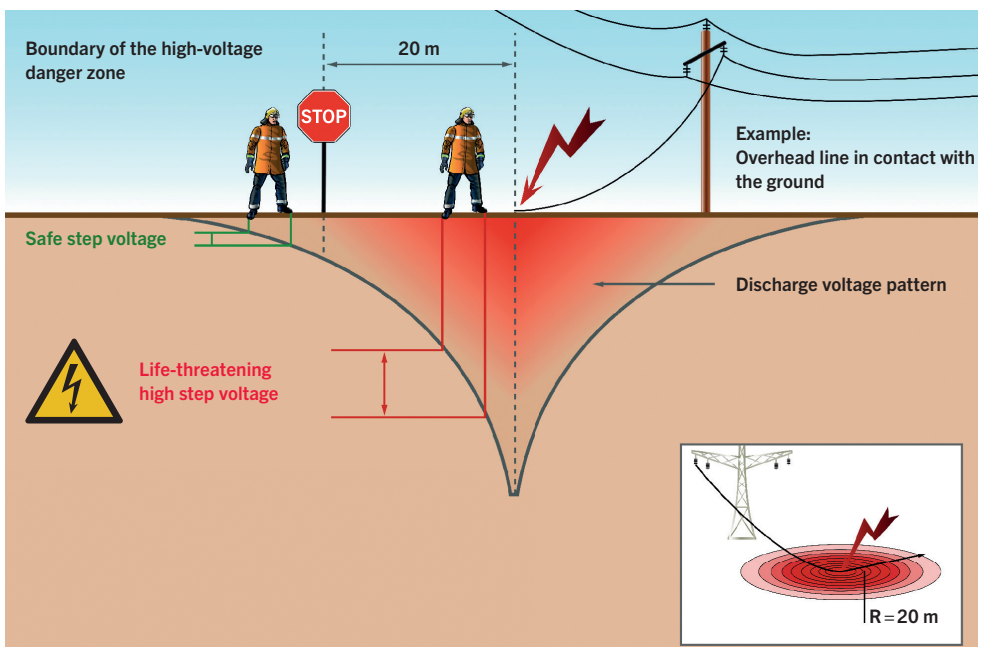
Entering the discharge voltage pattern can be life-threatening.

### Important

The incident area must be cordoned off at a radius of 20 m around the event and supervised until Swissgrid has confirmed the absence of voltage and earthing on site.

### Pay particular attention to:

- falling parts.
- conducting objects.
- metal fences or barriers.



## Undisrupted high voltage

**Distances to be observed between overhead lines and aerial rescue vehicles, aerial ladders, construction machinery, cranes, etc.**

**The safety distance is equal to  $a = 7$  metres.**

Depending on weather conditions, the safety distance must be increased accordingly (e.g. wind). Swissgrid must be summoned as soon as hydraulic platforms, aerial ladders, construction machinery, cranes, etc. are used near a high-voltage line.

**Distances to be observed for extinguishing agents in line with the fire class table Behelf Elektrodienst**

Water with full jet:	10 metres
Water spray:	5 metres ( <b>Swissgrid recommends 7 m</b> )
Foam:	<b>only in voltage-free plants</b>

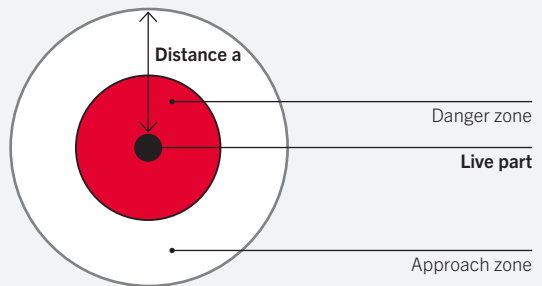
Distance specifications only apply if the water is clean.

Spraying overhead lines must be avoided in order to prevent cable oscillations and resulting short-circuits or other damage.

### High-voltage live parts

The danger zone marked in red is the zone in which a voltage flashover occurs as soon as an object or person moves close to the live part.

The approach zone may be accessed only by qualified personnel under supervision.



**The guidelines mentioned apply in addition to the following regulations:**

- Regulations on basic knowledge – FKS
- Regulations for the electric services (auxiliary) of the Swiss Fire Brigade Association
- Suva pamphlet 66138  
«Warning, electric shock! Using work equipment near overhead lines»

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