

Instructions

Instructions for training_access_safety cards to Statnetts electrical installations

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Based on the Norwegian document SDOK-515-19

1 Governing policy and legislation

These Instructions for training/access/safety cards to Statnett's Electrical Installations are subordinate to [policy sikkerhet](#) (Safety Policy). They are a supplement to, and superceded by [FSE 2006](#) (Safety regulations related to the maintenance and operation of electrical installations) which is pursuant to the [Lov om tilsyn med elektriske anlegg og elektrisk utstyr](#) (Act relating to the Inspection of Electrical Installations and Electrical Equipment).

2 Purpose and validity

The purpose of these Instructions is to ensure a high level of safety during work on or in the vicinity of Statnett electrical installations and during their operation, by requiring adequate planning of all activities and the implementation of necessary safety practices to avoid any risk to life, health or property.

This set of instructions regulates Statnett's routines for access to electrical installations.

This set of instructions applies to all electrical installations where Statnett has operational responsibility.

3 Intended audience

All Statnett and external employees applying for an independent access to Statnett electrical installations or who work under others at a Statnett electrical installation where Statnett has operational responsibility.

4 Definitions / requirements

Operations Manager HV (high voltage): Person appointed by the owner/manager to carry out and be responsible for the ongoing management and maintenance of electrical installations.

Operations Manager LV (low voltage): Person appointed by the owner/manager to carry out and be responsible for the ongoing management and maintenance of electrical installations.

Access permit (Norwegian term: *Adgangstillatelse*): Permission to access Statnett electrical installations is regulated through the issuing of safety cards. An access permit is required in the following situations:

- *For independent access to high voltage areas*
- *For independent access to low voltage installations that are not safeguarded against direct contact*
- *For unescorted climbing of pylons (aerial lines) (this does not apply to aerial lines under construction)*

Escort Permit (Ledsagingstillatelse): Authorization to escort a person who does not hold an access permit. Before allowing someone to enter a site, the person must first be granted (escorted) access, cf. definition "Give access"

Give Access (Gi adgang): Authorization to grant a person escorted access to an electrical installation. A person may only be given physical access to an installation if accompanied by a person with authorization "Escort Permit", provided permission has been given by a person with authorization "Give Access".

Safety card (Sikkerhetskort): Item in the safety card database indicating the holder's authorization with respect to Statnett's electrical installations. The safety card is issued by the Statnett Operations Manager and is valid for Statnett electrical installations where Statnett has operational responsibility. The individual person can take a printout/screen dump of the safety card.

Safety Supervisor HV (high voltage): Person appointed to have responsibility for electrical safety at the worksite.

Safety Supervisor LV (low voltage): Person appointed to have responsibility for electrical safety at the worksite.

5 Training/access/safety card

5.1 Documented safety training for personnel applying for an access permit and different roles on the safety card

Please see the process [Styre adgang og tillatelser til å utføre arbeid i Statnetts anlegg](#) (Control of access and permissions to conduct work in Statnett's installations for more detailed information – only in Norwegian).

Concerning **personnel applying for access permits (new safety card or safety card expired), safety training must be documented on a dedicated web form.** See example in doc. no. [1880273](#).

The above is not required if:

- An agreement has been entered between the Statnett Operations Manager and the Operations Manager from another company that the other company's safety cards (access card and escort) are valid in Statnett installations.
- A safety card is issued based on a request/confirmation from the Operations Manager from the other company.

A separate declaration is required for forestry clearance work (enclosed a separate instructions document).

5.2 Documented safety training for persons without an access permit, working under the supervision of a Safety Supervisor HV/Safety Supervisor LV

Persons working under the supervision of a Safety Supervisor HV/Safety Supervisor LV must have taken at least one of the following courses (or a course for distribution systems with equivalent content):

- E-learning course "Access to electrical installations".
- E-learning course "Activities near power lines and underground cables".

Refresher courses must be taken regularly. No more than 12 months may lapse between courses.

A copy of course certificates should be sent to: Sikkerhetskort@Statnett.no.

The training specified above may in the following cases be replaced by local training at the site performed by the appointed Safety Supervisor HV/the person to be appointed as Safety Supervisor HV:

- Activities performed by rescue teams, police and fire fighters.
- Work near to Statnett's live high voltage installations, where a job safety analysis (Norwegian term: SJA), approved by Statnett's Safety Supervisor HV, has been prepared.

5.3 Complete summary over requirements for training of personnel within electrical safety

In FEK § 1 with guidelines the concept of work is used (... *attach to electrical installations and electrical equipment*). The term "work" is used to mean every form of activity, such as planning, projecting, conducting, operation, maintenance, repair and control. To perform such work, it is necessary to provide training in electrical safety. A requirement document has been drawn up to define training requirements personnel who are going to perform work related to Statnett electrical installations: [Matrise for krav til opplæring for arbeid i og med elektriske anlegg](#) (Matrix showing requirement for training to work in and with electrical installations – only in Norwegian)

5.4 Keys and access card to high voltage areas

Only persons with access permit are permitted to be in possession of keys and access card to high voltage areas. The Operations Manager, Local Area Manager, or other persons authorized by the Operations Manager may determine who may hold a key and access card.

Keys and access card must be kept securely and losses reported immediately to the immediate supervisor.

On completion of a job or work contract, the key and access card must be returned to the person who issued them.

5.5 Notification of need for access to a substation

If access to a substation is necessary and an escort or other assistance from operating personnel is needed, this must be arranged in advance preferably giving at least five days notice to the Local Area Manager.

5.6 Projects – Project Manager's responsibility

If an access permit or escort permit is required for external personnel, the Project Manager is responsible for ensuring that the applicant receives training in First Aid and the FSE (Safety regulations related to the maintenance and operation of electrical installations) and that the document "Instructions for training/access/safety cards to Statnett's electrical installations" (this) has been studied. The Project Manager is also responsible for training personnel who will undertake work led by the HV Safety Supervisor, cf. pt. 5.2. The Project Manager is responsible for the filling out of the attached request form, that sufficient documentation is attached, and that it is sent to the Local Area Manager.

5.7 If fire breaks out in the vicinity of an electrical installation

Statnett personnel must at all times escort fire fighters into installation areas. Statnett personnel must at all times oversee fire extinguishing efforts and be responsible for personal safety related to electrical installations.

5.8 EMF – Particularly vulnerable personnel

Employees who are pregnant or who have active implanted medical devices, such as pacemakers, hearing implants or insulin pumps, may be particularly vulnerable to exposure to electrical and magnetic fields (EMF).

It is the responsibility of each employee to notify their employer if this applies to them.

In the case of employees with an active implant, a risk assessment must be performed of the effect of electromagnetic fields on the implant. This assessment must be performed in consultation with a doctor or hospital. If no medical assessment already exists, the public exposure limits must not be exceeded, see [veileder for arbeid i elektriske og magnetiske felt](#) (guidelines for work in electrical and magnetic fields – only in Norwegian).

Pregnant women employed by Statnett must not work in field strengths over the public exposure limits. If necessary, Statnett will offer such employees alternative work during their pregnancy in order to comply with this provision.

5.9 Accidents – report to DSB (Norwegian Directorate for Civil Protection)

Injuries or damage caused by electricity or during work on or associated with the operation of electrical installations, shall be reported as soon as possible to the Norwegian Directorate for Civil Protection (DSB) . See section 8.1 in [Electrical safety procedural works](#): Documentation and notification of installations in accordance with FEF 2006 chapter 3. Internal notification in accordance with the applicable emergency plan is also required.

6 Abstinance from alcohol

Any person engaged to work on (or in the vicinity of) a Statnett electrical installation must agree to refrain from consuming alcohol or other intoxicants during the 8 hours prior to starting work.

7 Confirmation of compliance

The responsibility for checking compliance with instructions lies with the document holder and approving body.

The position of Operations Manager includes authority to draw up and approve work procedures, guidelines and instructions in areas covered by electrical safety in accordance with [policy sikkerhet](#) (Safety Policy – Norwegian document only).

8 Enclosures and references

References:

- [Policy sikkerhet](#) (Safety Policy – Norwegian document only) (SDOK-856-6)
- [Instructions for the Safety Supervisor HV](#) (SDOK-515-55)
- [Instructions for the Safety Supervisor HV and clearance teams when clearing wooded areas near high voltage lines](#) (SDOK-515-57)
- [Instruks for vernebekledning](#) (Instructions for personal protective equipment - only in Norwegian) (SDOK-587-20)
- [Electrical safety procedural works](#) (SDOK-515-73)
- [Matrise for krav til opplæring for arbeid i og med elektriske anlegg](#) (Matrix showing requirement for training to work in and with electrical installations – only in Norwegian) (doc.no. 3096718 in IFS)
- [Styre adgang og tillatelser til å utføre arbeid i Statnetts anlegg](#) (Control of access and permissions to conduct work in Statnett's installations – only in Norwegian) (process in Statnett)
- [Veileder for arbeid i elektriske og magnetiske felt](#) (guidelines for work in electrical and magnetic fields – only in Norwegian) (dok.nr. 3273394 i IFS)
- [Safety regulations related to the maintenance and operation of electrical installations](#) (www.dsb.no)
- [Forskrift om elektroforetak og kvalifikasjonskrav for arbeid knyttet til elektriske anlegg og elektrisk utstyr](#) (Regulations of electrical enterprises and qualifications to work on electrical installations and electrical equipment – only in Norwegian) (www.lovdata.no)
- [Forskrift om elektriske forsyningsanlegg](#) (Regulations related to electrical distribution system - only in Norwegian) (www.lovdata.no)
- [Lov om tilsyn med elektriske anlegg og elektrisk utstyr](#) (Act relating to the Inspection of Electrical Installations and Electrical Equipment - only in Norwegian) (www.lovdata.no)

9 Version log

Valid as of	Revision classification (New/Updated/Vocabulary/None)	Description of important changes
01.01.2023	Updated	Changed reference from Functional Policy Electrical Safety to Safety Policy. Changed reference from separately procedures to procedural works.

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