Cable factory audit requirements and process, 12-24 kV

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1 Audit process

The audit process contains three to five parts as illustrated in the figure below. The two last steps are only required in case of moderate or significant findings.



1.1 Questionnaire

The purpose of the questionnaire is to get a description of the factory's operations and methods to approach management of quality, environment and operational health and safety (OHS).

The questionnaire is the base for the pre-inspection meeting and the factory inspection. The questionnaire is sent out when date for audit has been agreed.

1.2 Pre-inspection meeting

The pre-inspection meeting usually includes:

- A factory presentation.
- Clarifications to the questionnaire.
- Description and demonstration of management systems and other support systems, e.g. for production planning and quality management.

1.3 Factory inspection

The purpose of the factory inspection is to verify that the factory is working according to described methods and processes. Focus areas are decided based on the answers in the questionnaire and pre-inspection meeting.

1.4 Action plan

An action plan is required in case of moderate or significant findings. The factory needs to provide the action plan within a determined time (e.g. within one month).

1.5 Follow-up on action plan

Follow-up activities are chosen dependent on type of issues and the factory's action plan. Activities may include:

- Written response to the action plan.
- Follow-up meeting
- New factory inspection.

2 Audit objectives, scope and criteria

The objectives, scope and criteria of the factory audit is based on Vattenfall's code of conduct for suppliers [1] including guideline [2] and Vattenfall Eldistribution AB's environmental requirements [3].

2.1 Criteria

A factory is approved if the following criteria is fulfilled:

1) Compliance with Vattenfall's Code of Conduct for Suppliers [1]
2) Information is provided according to Vattenfall Eldistribution AB's environmental requirements [3].
3) The capability maturity level is on level "Defined" or higher.

3 Capability maturity level

Capability maturity levels are used to describe the factory's maturity within support systems (management systems and other systems providing support to processes and procedures).

The maturity levels are defined in the table below and the lowest acceptable level is "Defined".

Level	Critera	Characteristics (generic)
Excellent / Optimizing (highest)	Continuous process improvement is enabled by quantitative feedback from the process and from piloting innovative ideas and technologies.	***Stable and flexible.*** The organization is focused on continuous improvements and is built to pivot and respond to opportunity and change. The organization's stability provides a platform for agility and innovation.
Capable/ managed	Detailed data of processes and product quality are collected.	***Measured and controlled.*** The organization is data-driven with quantitative performance improvement objectives that are predictable and align to meet the needs of the internal and external stakeholders
Defined	Processes for both quality management and design/engineering activities is documented, standardized, and integrated into a standardized processes for the factory.	***Proactive, rather than reactive.*** Organization-wide standards provide guidance across projects, programs and portfolios.
Repeatable	Basic processes are established to track quality and other processes. The necessary process discipline is in place to repeat earlier successes on projects with similar applications.	***Managed on the project level***. Projects are planned, performed, measured, and controlled.
Initial (lowest)	Processes are characterized as ad hoc, and occasionally even chaotic. Few processes are defined, and success depends on individual effort.	***Unpredictable and reactive.*** Work gets completed but is often delayed and over budget.

4 References

[1] GP07 *Vattenfall's Code of Conduct for Suppliers*
[2] Guidance to Vattenfall's Code of *Conduct for Suppliers*
[3] VN-D-I-267-2008 *Miljöhänsyn vid inköp och upphandling*