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# Kama-Potash substation, Perm region

Implementation of a HP, MS  
and EA solution in Russia

## Project Location

Kama-Potash substation, Perm region, Russian Federation located in the Perm region near Russia's traditional potash production sites, the Verkhnekamskoe potash project is EuroChem's second potash project. EuroChem is one of the world's leading mineral fertilizer producers and ranks among the top three European and top ten global producers by profitability. More info:

<http://www.eurochemgroup.com/what-we-do/production/usolskiy-potash-complex/#.VtcFsMcyKI9>

## Customer Requirements

A main step down substation is always the basis for a reliable power supply, which results in high requirements for power transmission and distribution solutions. The customer wants Siemens to provide a suitable solution which fits to their needs.

## Solution/Service Description

The Kama-Potash 220 kV substation is now under construction, with 3 x 63 MVA transformers and thus 189 MVA of connected capacity in total. The substation feeds in the medium voltage power distribution grid (6 kV) and in a complex of a secondary substation and switchgears. The maximum estimated load at the time of plant operation is 108 MW. The 220 kV feed line is 32 km long.

The detailed scope of the project consists of:

- 220 kV GIS
- Transformers
- MV switchgear (NXAir S)
- Relay protection and automation (SIPROTEC 5)
- Transformers
- Supervision and commissioning

## Customer Benefit

The Kama-Potash substation will be one of the best substations in the Perm area, as it is equipped with state of the art solutions offered by Siemens (220 kV GIS, transformers, MV switchgear, relay protection and automation, own needs). In the Perm area only the Usolskiy Potash complex has got a 220 kV GIS and transformers produced by Siemens so far.

## Reasons for Success

Siemens could offer the most convenient and innovative solution for the whole substation equipment with an attractive price.