



Scheme Impulse-Storm-S fire system for Russian Federal Grid Company

In September 18, 2014, in Moscow city a team of professional independent testers, also called Russian Federal Grid Company of Unified Energy System (FEES) performed the first test of Impulse-Storm-S technology on the test-field owned by company. To determine the effect of the new technology these tests were compared with standard technology designed for transformers extinguishing, which are now used in Russia and around the world.

Short video <http://youtu.be/jBzN0d8ipgY>

The effectiveness of the Impulse Storm-S technology exceeded all expectations. The FEES company approved new technology and has ordered the creation of a special extinguishing system for transformers at the conditions of high temperature (50 °C above zero), low temperature (-57 °C below zero) and also in conditions of water shortage.

Brief description of the new technology:

Impulse Storm-S Technology is composed of two components:

Impulse Storm Pressure Source.

Source pressure has been sufficiently described by us earlier and represents a deeply upgraded rocket engine fed by solid fuel. This engine emits a super fast stream of cold neutral gas instead of jet flame.

Impulse Storm-S Pulverization System.

The pulverization component is a deeply upgraded system of mixing and injecting liquid rocket fuel components into the combustion chamber of a space rocket.

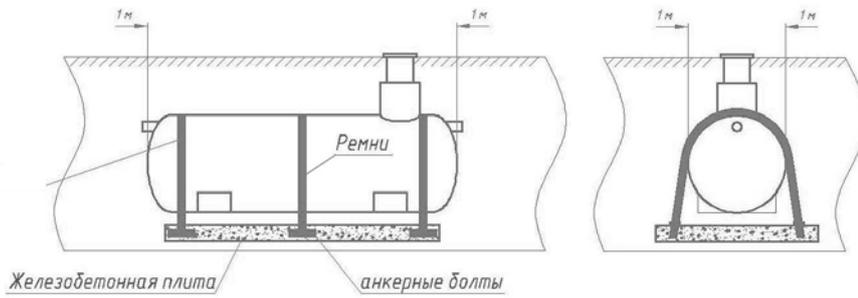
As everyone knows the jet stream in a rocket engine is created by three components during combustion: fuel, oxidizing agent, catalyst. These components are special parts of a space rocket. They are premixed in a uniform structure and set on fire afterwards.

The Impulse Storm-S Technology mixes water, neutral gas and powder (foam) in the fuel injector in a similar way and emits as a cold stream to fire. There are two unique ways: a two-phase technique and a single-phase technique.

In other words, our team of scientists has created a symbiosis of solid and liquid fuel rocket engines that instead of hot jet emits a stream of cold pulverized water or powder (foam) or neutral gas or a mixture of all three components.

Scheme of standard fire system for transformer field FEES

Underground fire tank of 500 tons of water

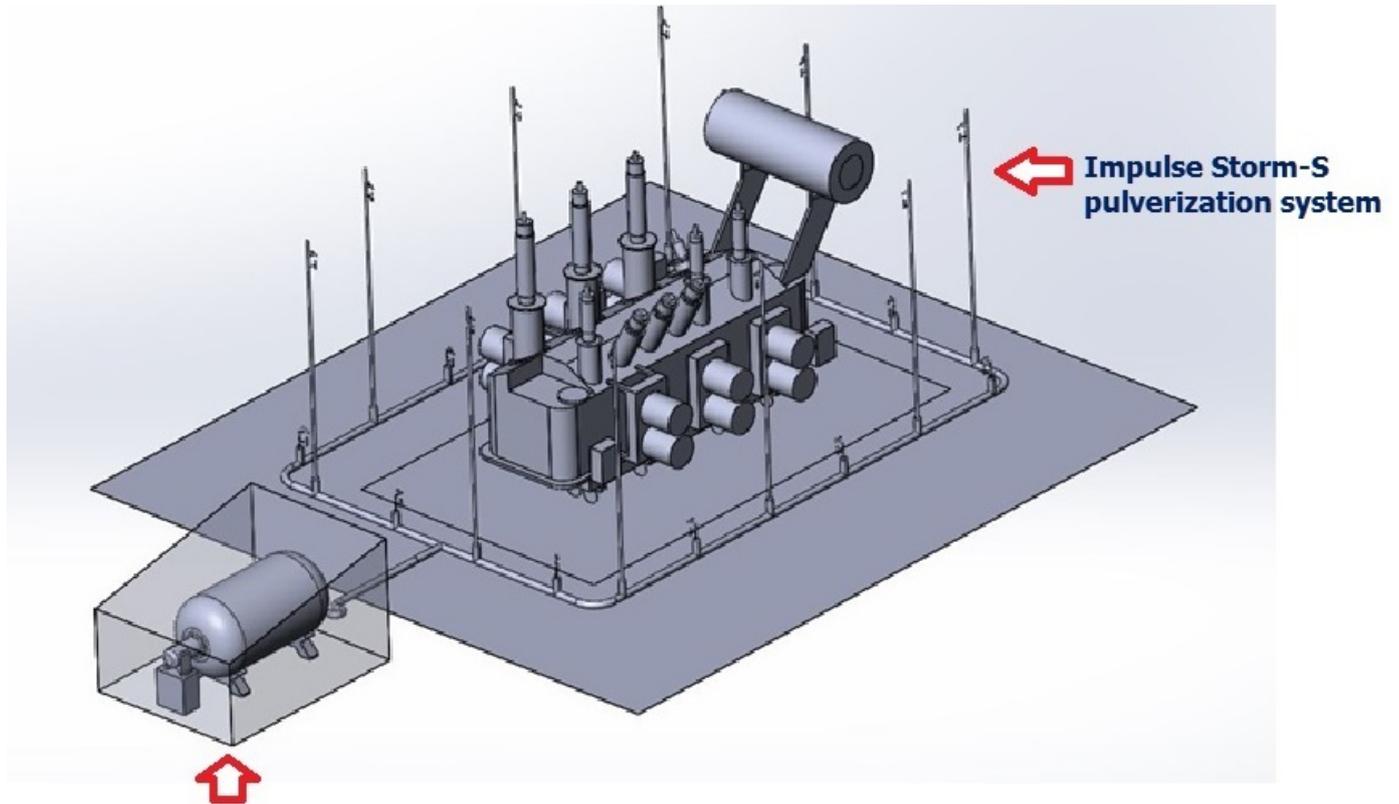


Pump station

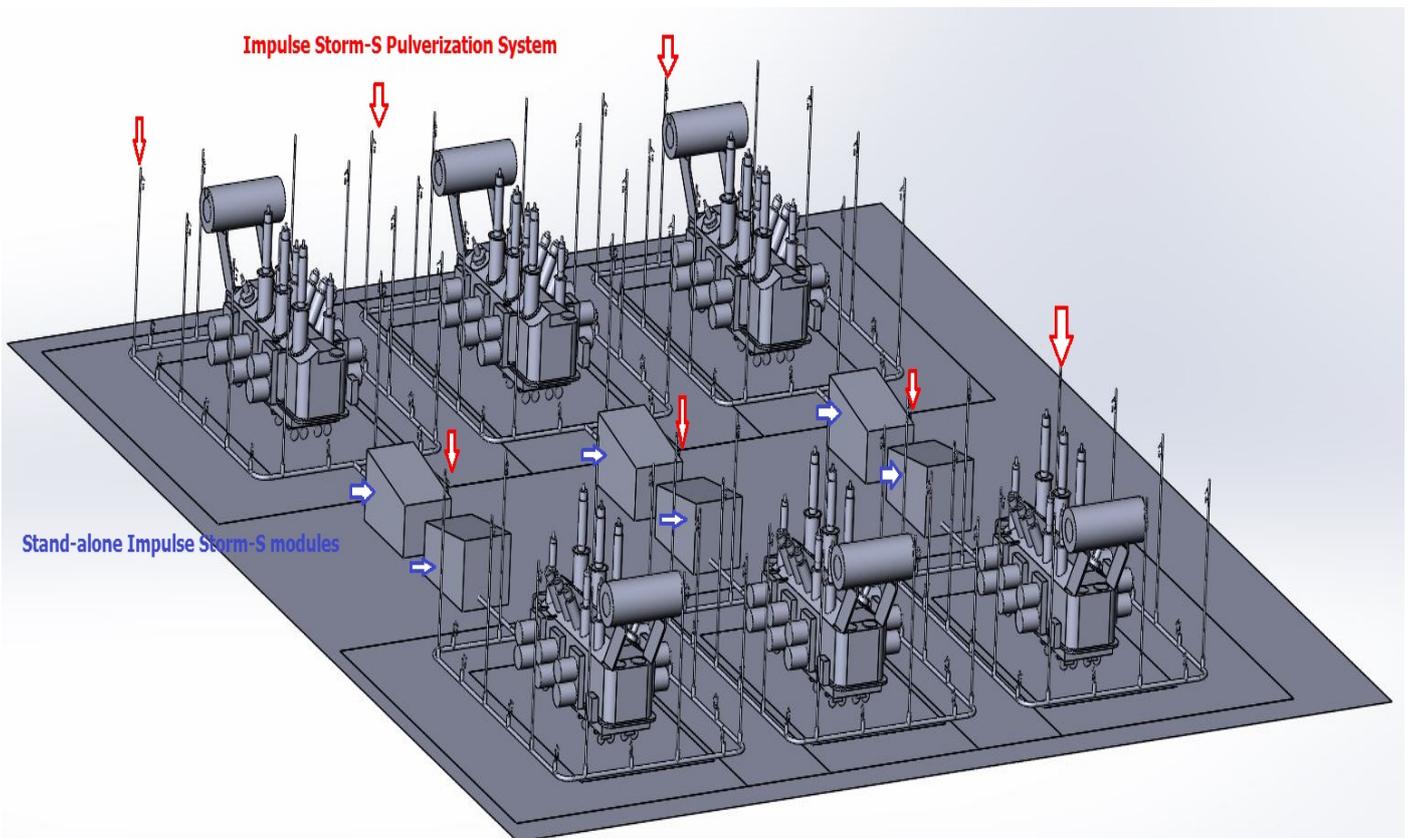


Transformers field

Impulse Storm-S fire system for transformers field FEES



Stand-alone water Impulse Storm-S module



Order summary of the Russian Federal Grid Company of Unified Energy System:

Create a fire extinguishing system for transformer field (a type of field where many transformers are located).

The new system should exclude:

1. Having a separate large water tank.
2. Having a pumping station.
3. Having a system of pipelines.

The new system should provide:

1. Autonomous work without the use of electrical power sources.
2. The ability to extinguish separate transformers without shutting down the transformer field.
3. Minimum water consumption.
4. Autonomous work without service for at least three years. The total lifetime for operation of the system of at least 10 years.
5. The minimum sluggishness of the system (from one to five seconds).

New Impulse Technologies company

www.impulse-storm.com

