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SUEK acquired Novosibirsk CHPPs in early 2018. Investment in this assets totals \$32 million. SUEK has almost completed the 2019 repair programme at Novosibirsk CHPPs and created a plan for next year.

Some of the facilities were repaired in excess of the planned scope because after inspecting the equipment, our technicians understood that the planned repair was not enough and that a major repair was required.

The changes affected one of the main repair programme components, i.e. replacing the heating surfaces of the boilers. Instead of the planned replacement volume of 620 tonnes, we actually replaced 665 tonnes. This will improve the reliability of CHPPs during the heating season.

No additional funding was required thanks to the extra funds in the programme budget in case of out-of-schedule repairs. SUEK matched the planned cost of \$32 million.

The development of next year's repair programme is almost completed. In 2020, the maintenance programme includes 8 boiler units with a total steam capacity of 2,810 t/h, 3 turbine units with an installed capacity of 320 MW and 2 turbine generators with a capacity of 320 MW.

What will happen if no repairs are made?

According to the standards, overhaul of CHPP equipment is done either every 5 years or based on the number of operation hours: 34,000 hours for turbines and 27,000 hours for boilers.

Nevertheless, experts are guided not only by rules and standards. The need for repair becomes obvious after checking the technical condition of the units. For example, a boiler operates in conditions of maximum metal wear because of the coal crushing and combustion processes. If the power engineers determine that it requires a major overhaul, not the planned one, the unit is included in the repair programme even if it was not originally scheduled in it.

'If we do not make repairs on time, equipment begins to fail. The most typical situation is a blowhole on a boiler surface damage. It leads to a shutdown of the unit. For CHPP, such shutdown means 400 tonnes less steam. Our consumers will not get enough heat,' Yury Krotov, SGC Deputy Technical Director for the Novosibirsk Branch, Chief Engineer, said.