



Opinion of ÚJD SR on the Identified Substitution of Material of Components Used in the Construction of Units 3&4 of Mochovce NPP

During the internal post-assembly inspection by one of the contractors providing the installation of components during the construction of Mochovce 3&4 NPP, a material non-conformance was identified in two T-pieces of DN15 pipeline installed at Unit 4. Based on the results of a subsequent audit in the company that supplied these components, SE MO34 decided to verify the remaining part of the supply from this company.

In view of the above findings, the complete delivery of piping parts from this contractor will be examined, while a graded approach was chosen depending on the importance of these components in terms of nuclear safety. For the most important components, every single piece will be inspected. For the less important ones, a random sample determined by a percentage of individual deliveries will be checked so that each delivery and batch is covered, and in case of negative findings, the scope of the inspection will be extended. At present, a summarization is still in progress and a database of installed components is being created, it will be a total of several thousand pieces.

The authenticity of inspection certificates is verified directly with the manufacturer of the metallurgical semi-finished product that issued the certificate, and at the same time the verification is also performed with authorized legal entities that have confirmed the quality and properties of the given product. Positive material identification is performed in parallel, possibly the chemical composition of the delivered components is verified by a laboratory. At present, more than two thousand measurements have been performed by spectrum analysers, and no further material substitution has been identified so far. That means that the use of a lower grade material instead of high-alloy corrosion-resistant steel has not been identified. However, the analyses performed so far show that in some cases the material of the installed component is not in conformity with the declared material in the inspection certificate. This means, among other things, that the installed material does not comply with the requirements of the nuclear facility design.

ÚJD SR has clearly defined requirements for documenting the quality and properties of material of metallurgical products used for production of safety related equipment. As part of the ongoing inspection, ÚJD SR checks how SE MO34, as the holder of permit for the construction of a nuclear facility, is going to demonstrate their fulfilment. In the event that SE MO34 cannot sufficiently reliably demonstrate the quality and properties of the materials used, or if it is proven that the content of inspection certificates in the supplier chain has been altered, such components will be replaced.

Now, it is not possible to determine exactly whether and to what extent the date of commissioning of Unit 3 of Mochovce will be shifted. The extent of any delay will depend on the results of the ongoing inspections of metallurgical material, and the extent of the measures that may result from them. In this respect, the most unfavourable findings would be those that would require replacement of some components of metallurgical material.

In parallel, ÚJD SR also inspects and evaluates other areas, proving the technical and qualitative readiness of Unit 3 for fuel loading. If the license holder does not prove the fulfilment of all legislative requirements, ÚJD SR will not issue a permit for commissioning of Unit 3 of Mochovce NPP 3&4.

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