

Nuclear power plant Krsko provides, on average, about 36 percent of the total electricity produced in Slovenia, where half of production delivers Croatia. For more than three decades, for how long it operates, in this nuclear power plant is produced 149.4 terawatt hours of electricity, and Krsko “retirement” is not yet in sight.

The decision to build a new unit of the nuclear power plant also justified to Slovenia, which already has been a net electricity importer for several previous years, is needed as much today. Reliability of the electric power system of Slovenia is challenged due to the fact that we have no other natural resources in addition to those already in use, while nuclear energy has an important place stated Director of GEN Energy, a company that owns part of the Slovenian nuclear power plant Krsko.

He argues that there is a valid reason to provide a transitional period during which two units of the nuclear power plant - the new and old one, would produce electricity together, by which would be taken advantages of the synergistic effects of their comparative work. Our interviewee explains that since the adoption of strategic decisions by the beginning of construction, it is necessary to pass three to five years, and so more to the completion of all works. Therefore, it takes about ten years until the decision to the production of the first kilowatt hours of new unit Krsko 2. For co-investment in this project above all are interested neighboring power companies that have assessed to be the long-term lack of electricity in this area that will bring together a competitive price, reliable supply and minimal environmental impact.

- We expect the share capital of our company and other Slovenian companies in the new unit will amount to 51 percent and we would use our own funds, loans and bonds in funding its construction. It makes sense to leave the rest to the neighboring power companies or portfolio investors. We already had concrete negotiations but also offer of 12 European power companies who are interested in the project of the new nuclear power plant. When it comes to equipment suppliers we already think of several companies. On this list are Westinghouse, Areva and Mitsubishi. All domestic enterprises qualified for these jobs would be included in the construction, installation and maintenance works - explains Novsak. Like the existing nuclear power plant also the new unit will be the energy object of international, respectively, of regional significance. Furthermore the cooperation with partners in the region is necessary. However, we should recall that Slovenia, which for more than three decades, along with Croatia, has successfully managed with nuclear power plant in Krsko, has a big experience in this area. Depending on the installed unit power, the new plant would annually produce between eight and 12 terawatt hours of electricity. By comparison, Slovenia last year produced a total of 15 terawatt hours of electricity. And that is not all. According to the plans, the district heating would be still secured from new unit of the nuclear power plant and, which is economically but also ecologically justifiable investment. The new plant would offer that opportunity and it should be used. It is not

specified for now which cities would be heated in this way - except the nearby Krsko and Brezica, also are mentioned more distant Ljubljana and Zagreb.

- Bringing decision in favor of building NEK 2 certainly would mean selection of the optimal way in certain economic future of Slovenia. The new unit of nuclear power plant would have a strong influence on the overall national economy with a competitive and stable electricity price. Besides with its building it is opened up the possibility for cooperation between Slovenian companies in all the developmental stages of the project but it also gives chance to establish long term business relationships in international markets with leading technology .

The construction of Krsko 2 represents for Slovenia a significant breakthrough towards independence when it comes to a reliable supply of electricity with the use of the best, most modern and safe technology. In addition, as an energy source with the optimum use of space, the nuclear energy contributes to the environment protection and achievement of the environmental goals that are a priority to the European Union. The nuclear waste storage is always bound to the nuclear power plant. All waste generated now during the electricity production in Krsko is safely stored at the location belonged to the plant. It was also selected and confirmed the location near the nuclear power plant Krsko where the next year will be built the waste storage of the low and intermediate radioactive level. The radioactive material that occurs during the other activities in Slovenia will be also disposed with the waste from nuclear power plant.

- Building unit Krsko 2 means a long-term orientation towards the electricity production from nuclear power plant. This would have a positive impact on the costs of radioactive waste disposal and its degradation. It is known that there is a relatively little waste for which should be taken care during and after use, and thus, further capacity increasing of the landfill of such waste would mean a minimum increase of absolute costs, which would, of course, be divided through much longer period. In that way these cost compared to a megawatt of electricity produced in nuclear power plant would be smaller than they are today - estimated Novsak.

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Estimates

According to our estimates, the construction of the new unit would cost between three and

Slovenia/Croatia: GEN-I new NPP Krsko2 unit projected for electricity exports, Westinghouse, Areva and Mitsubishi as contractors

five billion EUR. Price depends on the strength of the unit and the plan is it to be between 1,200 and 1,600 megawatts. Such plants are being built now in the world. The new unit should be built on the location of Krsko, where otherwise the old power plant has already worked and where are concentrated people, knowledge and security. The trunk Krsko-Bericevo would allow joining the new power plant to the power system, and we have other infrastructure for its operation - says Martin Novsak, director of the company GEN Energy.