



РусГидро

Чистая энергия

Energy bridge «Russia-Japan»

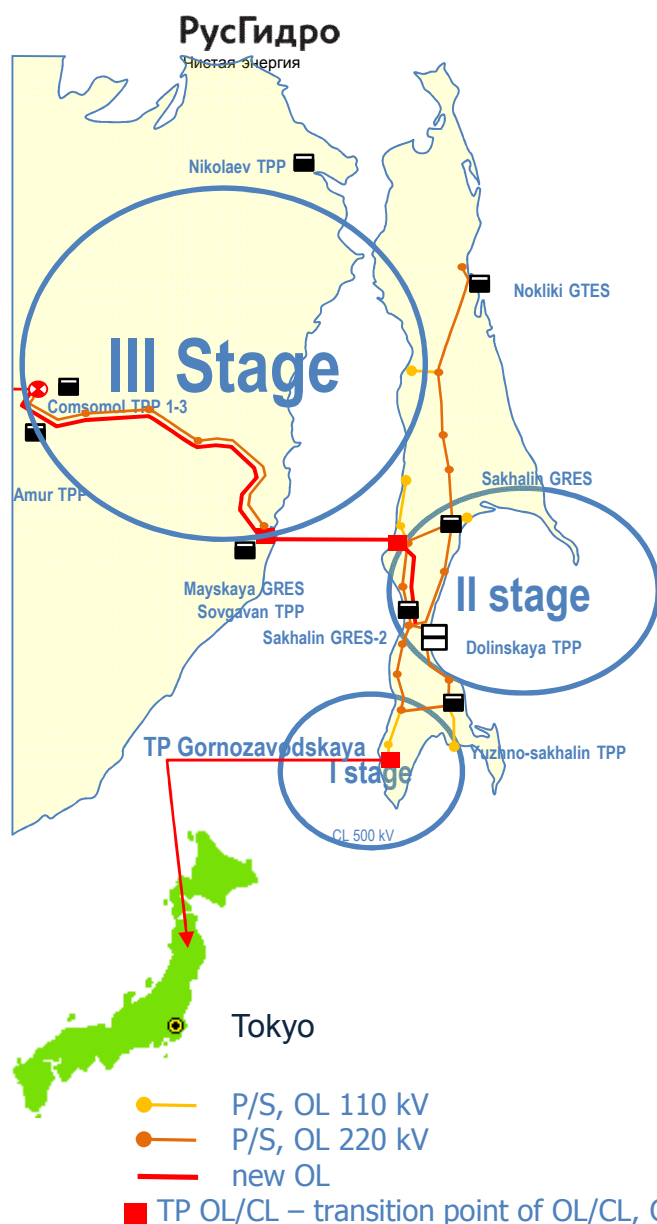
Speaker:

**Chairman of the Management Board – General Director of JSC "RusHydro"
Nikolay Shulginov**

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Stages of the Project



| Stage | Ключевые мероприятия в российской части | Export volume | Actions for the laying of underwater cable |
|------------------|--|---------------|--|
| Stage I (2020) | <ul style="list-style-type: none"> The construction of the 2-3 stages of the Sakhalin GRES-2 with the increase of installed capacity up to 360 MW The construction of grid infrastructure (additional OL, OL/CL converter station Gornozavodskaya) | Up to 400 MW | Installation of underwater cable from Sakhalin island to Northern Hokkaido (Ishikari/Wakkanai) with a distance of 50-200 km* |
| Stage II (2022) | <ul style="list-style-type: none"> The construction of a large export-oriented generation "Dolinskaya TPP" (up to 660 MW) Further expansion of the network infrastructure | Up to 1000 MW | Installation of underwater cable from Hokkaido (Ishikari/Wakkanai) to Aomori (Honshu) with a distance of 650-800 km* |
| Stage III (2025) | <ul style="list-style-type: none"> The connection of the Sakhalin energy system with the United Energy System of the East by underwater DC cable | 2-4 GW | Installation of a submarine from Aomori (Honshu) cable to Kashiwazaki (Honshu) with a distance of 400 km |

Total cost for 3 stages in the Russian part of the Project is estimated at USD 5.7 billion. excluding costs for the construction of additional generation in the UES of the East to increase exports volumes

* - depends on the choice of connection point in Japan



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Activities within the Project

Activities undertaken by the Russian side:

Developed preFS of the Project, in which:

- ✓ Researched options for the development of energy infrastructure on the territory of Sakhalin island with a selection of key technical solutions
- ✓ Preliminary negotiations with Japanese companies
- ✓ Prepared preliminary possible routes of a underwater cable
- ✓ Developed financial model in the Russian part of the Project

Further activities for development of the Project

- Completion of the preFS of the Project
- Definition of participants of the Project from the Russian (Inter RAO, etc) and Japanese side. Definition of operator of the Project and implementation scheme
- Negotiations with energy companies in Japan to determine the price of supply of electricity
- Further negotiations with suppliers of equipment for power plants, network infrastructure and underwater cable, general contractors, financial institutions
- Signing of an intergovernmental agreement
- Detailed development of the Project during FS



Thank You for the Attention!