

IZOLYATOR'S STRATEGY OF INTERNATIONAL COOPERATION

For publicity purposes



International cooperation has always been an important part of our work and Izolyator development. We greatly value every opportunity to prove reliability and efficiency of our

technologies by one of the most challenging tests — the test of time. We are searching for exactly such long-term and efficient partnerships, opening new regions of our presence.

Expansion of international cooperation and promotion of the integrative development of the power complex between national and regional electric power systems are strategic objectives of state importance today. Russian companies have actively engaged in the processes of building integrative ties with power engineers and electrical engineering companies from all over the world.

Strengthening of partner relations with power grid and generating companies as well as transformer plants in Europe and Asia is a key objective for Izolyator.

Presently, Izolyator exports its products to more than 30 countries of the world, and the company staff members are always open to dialogue, so that a friendly discourse could be continued with partners.

All high-voltage bushings that we make are certified according to Russian and international standards. Using own patented technologies, only the best available equipment and materials, work of highly qualified personnel and stage by stage production process control, guaranty a high technical level and product quality of Izolyator plant products.

Izolyator has carefully analyzed the key trends of the international power market as part of strategic partners research and long-term cooperation planning. Our research has shown that India is one of the most promising partners in that respect.

The power complex of India is rapidly developing by, for instance, improving backbone power lines. Friendly ties since the Soviet Union times, a positive dialogue between the Federal Grid Company of the Unified Energy System of Russia (FGC UES) and the India Power Grid Corporation of India Limited Ltd., as well as Izolyator's operations on the Indian power market, allowed us to continue exchanges between the power grid companies and industrial enterprises of the two countries.

Another important factor of cooperation development is Russia's active role in the International Council on Large Electric Systems CIGRE. India is an active contributor to the Council, too: PowerGrid management heads the Indian National Committee of

Izolyator is a global leader in development and manufacture of 24–1200 kV HV bushings. The manufacturing facility of the company allows for production of 12 thousand high-voltage bushings annually. In its over a 122-year history, the plant has made over 620 thousand high-voltage bushings, operating on the overwhelming majority of power facilities in Russia and the CIS countries as well as 30 other countries in the world.



ALEXANDER SLAVINSKY

Chairman of the Board of Directors of Izolyator, Representative of Russia in SIGRE Subcommittee D1, Russian expert at IEC (TC 36 / SC 36A / JMT 5), Doctor of Engineering Science



Fig. 1
High-production insulation winding machine 252–1200 kV



Fig. 2
Meeting of FGC UES and Izolyator
representatives with I. S. Jha,
Chairman & Managing Director
of PowerGrid (in the center) and
board members of PowerGrid

CIGRE. Izolyator, in its turn, received a status of the Leading science and technology partner to Russian National Committee of CIGRE (RNC CIGRE) and became a base enterprise of study committee D1 RNC CIGRE “Materials and Emerging Test Techniques”.

Importantly, all our communications with partners are always very open. Thus, Izolyator, as the first in the world supplier of high-voltage RIP bushings to the state Indian power grid company PowerGrid, ran a series of public workshop for the technical specialists of PowerGrid, regional power grid companies APTRANSCO, TSTRANSCO and transformer plants T&R, CG, TELK, TBEA, Toshiba, where it familiarized the Indian colleagues with the technical features and construction design of Izolyator plant products.

Having expanded its presence, Izolyator began to work with the companies that control distribution of electric power across the states of India. In 2017, Izolyator plant received an inspection of representatives of PowerGrid and the regional power grid company TSTRANSCO. A series of successful tests of 145 kV 1250 A HV RIP bushings at Izolyator plant and the All-Russian Electrical Engineering Institute named after V. I. Lenin and 30 pieces of 52, 252 and 420 kV high-voltage bushings has proved to the Indian partners that

Izolyator products can be and should be trusted!

We should mention that all the tests and the inspection went in full compliance with IEC 60137-2008 standard, proving the high quality of our products. Besides, we received several orders for bushings of various voltages from Indian power grid companies and

transformer equipment OEMs, which we timely delivered under the contract terms.

As a cooperation initiative, in December 2017, we organized several business meetings in India: between FGC UES and PowerGrid and between industrial enterprises and power equipment OEMs of India and Russia.

Power Grid Corporation of India Limited (PowerGrid) is an India-based state company, engaged in construction, operation and maintenance of inter-state transmission system. The company owns and operates transmission network of about 106.804 thousand km of Extra High Voltage (EHV) transmission lines, 184 EHVAC & High Voltage Direct Current (HVDC) Substations with 205 923 MVA transformer capacity.



Fig. 3
The transformer with Izolyator
bushings at PowerGrid 400 kV
substation

We also ran a “Public Conference in power industry between Russia and India”. Representatives of all key divisions of PowerGrid and technical specialists from the largest Indian electrical engineering companies took part in the conference.

Among the most important results of the meetings and conference, is consideration of Russia’s leading power products manufacturers’ experience for modernization of electrical complex of India. It is based on the long-standing successful interactions with the Federal Grid Company of Russia that has the longest outstretch of power lines in the world and, consequently, the biggest park of high-voltage equipment, operating in various climate conditions.

Izolyator presented key principles of assessment of operating risks of obsolete equipment, types of scheduled measurements, requirements for additional diagnostics and principles of decision-making on OIP bushings replacement.

Actively contacting regional power grid and generating companies, strengthening mutually beneficial and long-term relations with key consumers of high-voltage bushings in the Indian market, Izolyator was able to increase its order portfolio.

As result of that extensive work in the region, we signed supply contracts for large batches of high-voltage RIP bushings with rated voltages 52, 252, 420 and 800 kV to different regions of India — more than 520 pcs totally!

Izolyator is developing a productive dialogue with Indian partners, sends shipments and shares experience in operation and maintenance of high-voltage bushings.

In the first quarter of 2018, Izolyator won a tender of the state Indian power grid company Power Grid Corporation of India Limited for delivery of 420 and 800 kV high-voltage RIP bushings.

As Izolyator expands its presence in Asian markets, we expect to sign a Memorandum of Understanding with the Indian Mehru at CIGRE session in Paris. The document will entail creation of a joint venture to manufacture HV bushings with modern RIP insulation on the territory of India. Mehru Electrical & Mechanical Engineers (P) Ltd. makes measuring transformers for up to 420 kV voltages. The company is one of the leading suppliers of measuring transformers not only in India, but in the whole world.

Operation on the highest level and in conformity with world standards is what gives Izolyator advantage over other manufacturers of electrical equipment. The constructive dialogue of Russian and Indian colleagues is a remarkable fact, speaking for consideration, openness and interest to development of long-term and mutually beneficial partner relations.



Fig. 4
Assembly shop of Izolyator plant