IZOLYATOR

№1(1) January – December 2013

CENTURIES-OLD TRADITIONS - STATE-OF-THE-ART TECHNOLOGIES

TOLOGILO

Publication by Izolyator Co.

3 Global Business Tour



IZOLYATOR
Wins the UETM
Tender



New 10-52 kV bushings



The Company Today



Centuries-old traditions – state-of-the-art technologies

IZOLYATOR Co. is a steadily-developing innovative company offering top-notch solutions in high-voltage insulation. The company's vector of development is fully determined by both existing and forecasted needs of the power industry in reliable and easy-to-operate insulating equipment with a long service life.

We at IZOLYATOR Co. design and manufacture high-voltage bushings for power-generating equipment for use in diverse systems that generate, transmit, distribute and consume electric energy. These systems comprise:

- Nuclear, thermal and hydro power plants;
- Main, distribution and municipal power networks;
- Electric substations at major manufacturing, transport and oil and gas industry enterprises.

Over its long history, which dates back to 1896, the company has manufactured and supplied to Russia and many other countries hundreds of thousands of high-voltage bushings noted for their reliable operation in diverse geographic and climatic conditions. Today, some 20% of the company products are exported. In Russia and the CIS, IZOLYATOR has been a traditional market leader with an estimated market share of 70–80%. The company, being the official supplier of Russia's United Energy Systems, Inter RAO and other major customers, holds Rostekhnadzor licenses to design and manufacture bushings for nuclear power plants.

In the mid–2000s, IZOLYATOR Co. commissioned a greenfield high-voltage bushing manufacturing facility that was specially designed and built near Moscow. Process lines of this high-technology facility with a manufacturing area of about 24 K m2 feature state-of-the-art equipment from leading manufacturers in Russia and abroad.

Message from the Management



Our Common Road To Success!

The beginning of a new year is always a moment when you have to look back to assess what has been done and plan goals and objectives for the future.

While in general this was a difficult year for the Russian and international economy, it became an extremely intense and productive period for IZOLYATOR Co. In 2013 the company, in addition to making major improvements in the process of high-voltage bushing manufacture through the purchase and commissioning of new modern equipment, was also able to strengthen its relationships with partners and clients from across the world.

In a rapidly-developing power-engineering market, IZOLYA-TOR Co. associates and will always associate its well-being with the success of our suppliers and clients. We sincerely thank all consumers, suppliers and partners for their joint fruitful efforts in 2013.

On behalf of the entire IZOL-YATOR Co., I wish that the new year becomes a year of successful personal and professional development and achievement of all goals for everyone.

All

Alexander Slavinsky, Chairman of the Board of Directors IZOLYATOR Co.

CENTURIES-OLD TRADITIONS - STATE-OF-THE-ART TECHNOLOGIES

WE CREATE THE FOUNDATION FOR A SUSTAINABLE POWER SUPPLY OF SOCIETY AND EVERY MAN WE ARE AIMED TO BE A WORLD LEADER
IN DESIGN, PRODUCTION AND INTRODUCTION
OF CURRENT TECHNOLOGIES INTO
THE POWER SECTOR



Direct Speech



Dear Colleagues and Partners!

Thank you all for your hard work and commitment in 2013 which became a remarkable year full of events and changes! That year marked not only a large-scale structural change on the Russian power-engineering market but also a significant growth in the number of our international projects.

In the new year, the company's main and constant goal remains further development of its relationships with the Russian-based consumers of high-voltage bushings. Based on the objective to strengthen the positions of Russian companies in international markets as declared by the Russian Ministry of Energy and considering the growing demand for high-quality IZOLYATOR Co. products in international markets, we can state that strengthening our presence outside Russia becomes a strategic goal for the company.

I sincerely thank all partners, clients and employees of IZOLYA-TOR Co. for their hard work. I'm positive that working together as a team we will be able to achieve considerable results both for Russia in general and for every one of us in particular.



Ivan Panfilov
Commercial Director
Deputy CEO IZOLYATOR Co.

Panorama



SUPPLY PROGRAM FOR UNITED ENERGY SYSTEMS NOW COMPLETE



In 20013, the company fully and within the specified deadlines completed the program of high-voltage bushing supplies to United Energy Systems – a subsidiary of Rosseti LLC. This program was imple-

mented within the framework of direct long- and shorty-term contracts for the supply of high-voltage bushings rated for voltage categories up to and including 500 kV.



MEETING WITH REPRESENTATIVES OF RUSSIAN HYDROPOWER INDUSTRY

IZOLYATOR Co. took an active part in a workshop organized by RusHydro LLC for engineers servicing electro-technical equipment of production engineering units at hydropower plants and held at the Volga training center – a branch of the corporate Hydropower Industry University on 11–15 November 2013. We thank RusHydro for the invitation to the workshop as well as for the active and fruitful discussion of technical aspects of our operations and issues relating to further development of mutually-beneficial cooperation.

IZOLYATOR CO. BECAME SUPPLIER TO INTER RAO GROUP

On 24 January 2013, IZOLYATOR Co. was accredited as a supplier to Inter RAO LLC. This accreditation is a mandatory requirement specified by the energy giant within the framework of the procedure for selecting suppliers of equipment for its needs.







of Events













GLOBAL BUSINESS TOUR

Within the framework of a global tour on November 3–16, 2013, IZOLYATOR Co. representatives visited its key clients – transformer manufacturers Crompton Greaves (Belgium, Hungary), Kolektor (Slovenia), Hyosung Corporation (South-Korea), Iljin (South-Korea), Hyundai Heavy Industries Co. (South Korea,

Bulgaria), Koncar (Croatia), ETD Transformatory (Czech Republic), JST (France), and Energo-PRO (Bulgaria) as well as the exhibition Electric, Power and Renewable Energy held in Indonesia.

The negotiations ended with signing a number of framework agreements on cooperation both in Russia and abroad. We thank all our partners for organizing the meetings and hope that our cooperation will continue in 2014.

QUALITY AND RELIABILITY OF BUSHINGS FOR NUCLEAR POWER PLANTS

On April 10, 2013, IZOLYATOR Co. once again extended its license authorizing it to design and manufacture equipment for nuclear power plants. The receipt of all the corresponding permits from Rostekhnadzor of the Russian Federation testifies the high quality and reliability of high-voltage bushings manufactured by our company.



Communication

UPGRID – 2013: A CONTEST OF INNOVATIONS

The international forum UPGrid: The Power Grid Complex. Innovations and Development organized by United Energy Systems LLC and held in Moscow on November 29–31, 2013 is of special importance for IZOLYATOR Co. as its high-voltage bushings were tested and recognized suitable for use at United Energy Systems facilities. For IZOLYATOR Co., the main result of the participation in the forum is the possibility to learn about the latest technology developments and yet again demonstrate the high quality of our products.



RUSSIA'S ELECTRIC NETWORKS – 2013: FACING THE CONSUMER

IZOLYATOR Co. traditionally takes part in the international exhibition Russia's Electric Networks. Last year it was held in Moscow on November 3–6. The event involved many business meetings and discussions with representatives of interregional energy distribution networks and leading transformer manufacturers from Russia and abroad.

The main result of the exhibition was refreshing the existing and establishing new business contacts with interested enterprises of the power engineering industry and providing them with information on financial performance and technical achievements of IZOLYATOR Co. in 2013.





PANORAMA

Direct Speech



Dear Colleagues and Partners!

A mandatory rule existing at our company requires us to maintain open and transparent relations with partners and consumers. The company's adherence to this policy was demonstrated at the numerous public events held in 2013, primarily technical workshops that were hosted by us or held at the premises provided by our consumers. In addition, IZOLYATOR Co. took part in virtually all major power-generating equipment exhibitions both in Russia and abroad.

In 2014, the company is planning to step up its efforts aimed at increasing customers' awareness of the company's capability and product range. We are always open for dialog, always ready to answer your questions and proposals. We will use every effort to ensure that working with IZOLYATOR Co. is useful, easy, quick, simple and mutually-beneficial.

May you all have happiness, good health and trouble-free operation of your equipment in 2014!



Yuri Pavlov
Deputy Commercial
Director IZOLYATOR Co.

Workshops



ALLIANCE WITH ROSENERGOATOM GETS STRONGER



IZOLYATOR Co. took part in a technical workshop organized by Rosenergoatom Concern (part of the state-owned Rosatom corporation). On the last day of the workshop, a team from Rosenergoatom, comprised

of experts in nuclear power engineering toured a production facility at IZOLYATOR Co. We thank all the people who organized the event as well as the workshop's participants.

WORKSHOP AT KUBANENERGO LLC



On October 13, 2013, Krasnodar became the venue of a workshop organized for Kubanenergo technicians by IZOLYATOR Co. The parties, who view these meetings as extremely useful, are planning to hold such workshops

on a regular basis. IZOLYATOR Co. thanks the organizers for the warm welcome and the possibility to converse directly with their technical staff.

WORKSHOP AT ROSTOVENERGO LLC



Another workshop was held on October 11, 2013 in Rostov-na-Donu for technicians employed by Rostoveenergo (a branch of MRSK Yuga). IZOLYATOR Co. appreciates the warm welcome and fruitful business-like atmosphere at the workshop.

MEETING WITH POWER ENGINEERS OF METALLURGICAL COMPANIES



IZOLYATOR Co. took part in a seminar attended by managerial and engineering staff of the power-engineering function at metallurgical enterprises, hosted by Corporation of Ferrous Metal Manufacturers on November 20–21, 2013.

The event provided a rare opportunity to acquaint the power engineers of metallurgical companies with the latest IZOLYATOR products, for which we are very grateful to the organizers.



WORKSHOPS AT MRSK URALS LLC



At the invitation of MRSK Urals, IZOLYATOR Co. delivered a series of workshops (held in Yekaterinburg, Perm and Chelyabinsk on July 22–24) on the working instructions for high-voltage bushings with RIP insulation. The company is grateful to the organizers for the opportunity to speak to the engineering staff and hopes that events of this kind will become regular.

PANORAMA



Forums



THE 13TH RUSSIAN ENERGY FORUM, BASHKORTOSTAN

IZOLYATOR Co. attended the 13th Russian energy forum The Urals' Power Industry. Energy Saving held in Ufa on October 21–24, 2013. In appreciation of its active participation, professionalism and the original design of its exhibition display, the company was awarded a special certificate.

ATOMEX – 2013 EXHIBITION IN MOSCOW

IZOLYATOR Co. took part in Atomex, the 5th international forum of suppliers for the nuclear industry organized by the state-owned Rosatom Corporation and held in Moscow on December 2–4. IZOLYATOR Co. is a long-time licensed supplier of high-voltage bushings for nuclear power plants. At the forum, the company once again demonstrated its ability to create modern equipment meeting the most stringent requirements of the nuclear power industry.





Presentation

WORKSHOP AT TGK-9 LLC



On July 22, in the city of Perm IZOLYATOR Co. delivered a presentation of the company and its products for the engineering staff of Territorial Generating

Company #9 (part of the KES holding). In particular, the company elaborated on technical issues arising during operation of high-voltage bushings.

Exhibitions



THE POWER INDUSTRY, ELECTRIC ENGINEERING AND ENERGY EFFICIENCY EXHIBITION IN YEKATERINBURG

On November 12–14, the Yekaterinburg-based EXPO center hosted the exhibition titled Power Industry, Electric Engineering and Energy Efficiency. The exhibition was attended by IZOLYATOR Co. The company used the event to hold negotiations with United Energy Systems, Elmash and some other of its business partners.

ENERGO – 2013, TATARSTAN

On April 9–11, 2013, Kazan hosted the 17th specialized interregional exhibition Energo–2013. It was organized by the Republic of Tatarstan ministry for industry and trade, the Republic of Tatarstan center for energy-saving technology and Generating Company LLC. The event was attended by such industry majors as ZAO Energomash – Uralelectrotyazhmash, Electrozavod LLC, etc.

IZOLYATOR's exhibition stand featured 35-kV high-voltage bushings with the main RIN and polymer external insulation as well as 110-kV bushings with the main RIN insulation and external insulation of porcelain / polymer.



IZOLVATOR

GUESTBOOK

Direct Speech



Dear Colleagues and Partners!

From myself and the entire sales function of the company I would like to thank the clients and suppliers of IZOLYATOR Co. for their hard work in 2013.

We always do as much as we can to develop both the existing and new mutually-beneficial relationships with all players on the energy generation, transmission and distribution markets. In particular, I would like to thank the Russian-based transformer manufacturers for an open dialog. I want to emphasize that for our company they represent a priority, strategic line of activity.

In 2014, we will continue to use our best efforts to strengthen partner relationships with the already existing clients and find new customers.



Mikhail Kharitonov Sales Manager IZOLYATOR Co

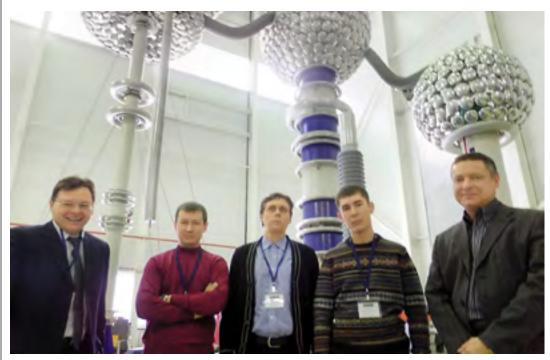
Tenders



IZOLYATOR WINS THE UETM TENDER

In April 2013, ZAO Energomash – Uralelectrotyazhmash announced an open tender to select the supplier of 110 and 220-kV bushings for its industrial transformers. On May 31, IZOLYATOR Co., which offered the best prices, conditions and bushing times, was announced the winner.

Business



VISIT BY BASHKIRENERGO DELEGATION



On December 12, the IZOLYATOR production facility was visited by a delegation from Bashkirenergo LLC, a subsidiary of Bashkir Power Grid Company.

The visitors toured the facility and had consultations on testing and operation of high-voltage bushings.







UES

COMPANY TOUR FOR MES WESTERN SIBERIA

On July 11, the IZOLYATOR production facility was visited by Dmitry Vodennikov, First Deputy Managing Director and Chief Engineer at MES Western Siberia, a branch of United Energy Systems. The distinguished visitor toured the facility and was shown the entire process cycle for the development and manufacture of high-voltage bushings.

(ZOLYATOR

GUFSTBOOK

Visits



MEETINGS WITH MRSK NORTH-WEST TO BECOME REGULAR

On November 12, the IZOLYATOR production facility was visited by a delegation of engineers from MRSK North-West, a subsidiary of Rosseti LLC. The companies agreed that in the future these meetings would be held on a regular basis.



ALL FACETS OF COOPERATION WITH MOSENERGO LLC



In the summer of 2013, IZOLYATOR Co. was visited by a delegation from Mosenergo LLC (part of the Gazprom Group) to discuss the prospects of future cooperation. In August 2013, Thermal Power Plant #22 (a Mosenergo

branch) thanked our company for quick assistance and professionalism. In November 2013, Mosenergo and IZOL-YATOR Co. signed an agreement of intent providing for continued efforts aimed at developing bilateral relations.



IZOLYATOR CO. AND THE MOSCOW POWER INDUSTRY

Another visit to IZOLYATOR Co. was paid by a delegation from United Energy Company affiliated to the Government of Moscow's Department of Municipal Property. The visit, which took place on December 10, 2013, comprised a tour of the production facility and a round-table discussion on operation of high-voltage bushings with RIP insulation.



INTERNATIONAL

Direct Speech



Dear Colleagues and Partners!

In 2013, IZOLYATOR Co. set a long-term goal relating to active development of mutually-beneficial relationships with international partners. During that year, the company had many meetings with its key clients based in the CIS, Central Europe, Asia and North America. In addition, we took part in important industry exhibitions all over the world.

As a result of these efforts, we yet again assured ourselves that we are moving in the right direction. Our main priority today is strengthening our presence in international markets and developing long-term relationships with partners across the world.

It should be noted that in this dialog with both the existing and potential partners, the company was considerably supported by the increasingly high profile of the Russian Federation in global politics, the country's growing prestige and influence on the international arena. For its part, the company always used and will continue to use its best efforts to ensure that Russian-based manufacturers are viewed as trusted business partners all over the world.

In 2014, within the framework of our strategic development plan, we will strengthen partner relationships in Europe, India and South Korea. We are also planning to present our products in Eastern Europe and Scandinavia and increase our presence in China and in the Middle East.

I would like to thank our partners for interesting and fruitful cooperation in the hope that our mutually-beneficial relationships will continue to develop in 2014.



Aleksey Gavrilov, International Sales Manager IZOLYATOR Co Congresses

THE GLOBAL INMR CONGRESS

A delegation from IZOLYATOR Co. attended the Global INMR Congress held in Vancouver, Canada on September 8–11, 2013. The delegation was headed by Aleksandr Slavinski, Chairman of the Board IZOLYATOR Co.

The participation in the congress, attended by all leading international manufacturers of electrical-insulation equipment, was an excellent opportunity to learn about the latest trends and developments in the electrical-insulation materials industry.



Exhibitions

THE LARGEST FORUM OF TURKMENISTAN'S POWER INDUSTRY



IZOLYATOR Co. participated in the 6th international exhibition and conference titled The Main Directions of Development for Turkmenistan's Power Industry held in Ashkhabad on September 12–14, 2013 and organized by Turkmenistan's Ministry of Energy and Industry.

During the event, the company had negotiations with Turkmenenergo, the principal supplier of the state-owned Electrical Energy Corporation and a number of other players on the Turkmenistan's power engineering market.

CWIEME BERLIN – 2013

A delegation from IZOLYATOR Co. attended the exhibition CWIEME Berlin held in Germany on June 4–6, 2013.

CWIEME Berlin is the world's largest annual exhibition of process equipment

and perspective materials for the manufacture of power engineering products. This visit allowed the company to learn about the latest developments and trends in this area.

POWER UZBEKISTAN – 2013

ZOLYATOR Co. took part in the 8th international exhibition and conference Power Uzbekistan held in Tashkent on May 13–15, 2013. The official sponsors of the exhibition were the state-owned joint-stock company Uzbekenergo, the specialized association Uzsuvenergo affiliated to the Uzbekistan Ministry of Agriculture and Irrigation, and the Republic of Uzbekistan Chamber of Commerce and Industry.

IZOLYATOR's exhibition stand was visited by D.A.Isakulov, first deputy chairman of the board at Uzbekenergo. During the exhibition, the company delivered a technical workshop at Uzbekenergo.





INTERNATIONAL

Business Visits





COOPERATION WITH CROMPTON GREAVES WILL EXPAND



On June 20, 2013, IZOLYATOR Co. was visited by a delegation from Crompton Greaves, a company within India's Avantha Group. The delegation comprised representatives from two of Crompton Greaves European-based transformer manufacturers.

At the round-table discussion, the parties agreed to step up their mutually-beneficial cooperation.

ARMENIA STUDYING THE MARKET



On September 19, the IZOLYATOR Co. production facility was visited by A.A.Avagyan, the deputy chief engineer and director of power network operation department at ZAO Armenian Power Grid. This company

is a foreign asset owned by the Inter RAO Group.

During this return visit, the parties discussed design specifications of high-voltage bushings rated for all voltage categories.





INNOVATIONS

Direct Speech



Dear Colleagues and Partners!

The entire dynamics of the IZOLYATOR Co.'s manufacturing program, its intellectual and technological resources are subordinated to the main goal – the transition to a more reliable and easy-to-operate insulation with a longer service life. In the future, we intend to give even higher priority to recommendations and requirements specified by our clients.



Konstantin Sipelkin R & D Director Head of Special Design Dept IZOLYATOR Co



CABLE FITTINGS TO CUSTOMER SPECIFICATIONS

Under a contract with Sevkabel R&D Institute, the company has manufactured stress cones for use in cable terminals and cable sleeves meant for 110-kV cable with insulation of cross-linked polyethylene. These devices, manufactured using the traditional technology, are made of polymer material and feature an internal element for electrical field regulation. At present, the batch, consisting of 20 and 10 stress cones respectively, is being tested at Sevkabel.





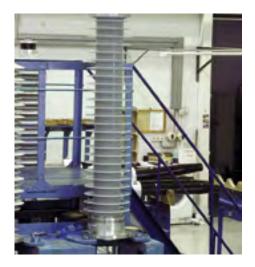
NEW 10-52 KV BUSHINGS

The IZOLYATOR design bureau has developed a new series of VSPT bushings rated for 10–52 kV and 250–315 A. These bushings are to replace the existing series VSTA and VSTB bushings. The new bushings have an external polymer insulation and a metal supporting flange. Their nominal and installation dimensions meet the corresponding Russian and international standards. Trial samples have already passed the acceptance tests. Today, the company is working to prepare the new product for certification by Rosseti LLC.

ATOR ATOR

INNOVATIONS





UNIVERSAL CABLE BOX

The company has designed and fabricated a test sample of a 110-kV cable sleeve with the possibility of capacitive field regulation by special liners placed inside the RIP insulation. The peculiarity of this cable sleeve is that it is suitable for all 110-kV cables with insulation of cross-linked polyethylene and external diameters of up to and including 88 mm. At present, the test sample is being

A RELIABLE TEST TAP

The company started the production of a sensing bushing using a new principle of measurement allowing to ensure instrumental and visual control of electrical grounding reliability. It uses a special jumper with multiple contacts that is put on the sensing bushing pin. The bushing cup is meant for sealing the bushings enclosure only.



THE FIRST SERIAL BUSHINGS WITH RIN INSULATION

In November 2013, the company manufactured a batch of 35-kV bushings for switches with RIN insulation. The material, used for winding the insulation core, is cellulose-free and does not absorb moisture. In all other respects, the technology for manufacturing these bushings is no different from that for manufacturing bushings with RIP insulation. The first batch of the new bushings is meant for trial operation at Mosenergo facilities..







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27 28 29 30 31

the date of IZOLYATOR Co.'s incorporation



December 22

professional holiday of the powerengineering industry

Birthdays of renowned inventors

24 25 26 27 28 29 30



29 30 31

January 20, 1775 - Andre Marie Ampere, a founding father of electrodynamics;

February 11, 1847 – **Thomas Alva Edison**, the famous inventor;

February 18, 1745 – **Alessandro Volta**, a founding father of the electrical theory;

June 14, 1736 - Charles-Augustin de Coulomb, a founding father of electrostatics;

July 10, 1856 - Nikola Tesla, the inventor of electrical machines and transformers;

August 14, 1777 – **Hans Christian Oersted**, discovered the magnetic action of electrical current;

September 14, 1847 – **Pavel Nikolaevich Yablochkov**, designed the first practicable electric lighting system; September 22, 1791 – **Michael Faraday**, the founding father of the electromagnetic field theory.

