

WE CREATE THE FOUNDATION FOR A SUSTAINABLE POWER SUPPLY OF SOCIETY AND EVERY MAN

# IZOLYATOR

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

Izolyator Corporate Edition

[www.mosizolyator.com](http://www.mosizolyator.com)

## FIRST QUARTER 2015 RESULTS

№ 1 (5)  
January – March  
2015



### PRODUCT ATTESTATION AT ROSSETI JSC



Izolyator-made bushings 24 to 550 kV RIP-insulated type successfully passed regular attestation at Rosseti JSC.



### ALEXANDER SLAVINSKY IS ELECTED VICE PRESIDENT OF AES OF RF



On the 17th of February 2015 Chairman of the Board of Directors of Izolyator Alexander Slavinsky was elected Vice President of Academy of Electrotechnical Sciences of Russian Federation.

The 2014 report of the organization names Izolyator one of base plants for the Academy.

All-Russian public organization Academy of Electrotechnical Sciences of Russian Federation was founded following the initiative of leading Russian scientists and industrial manufacturers in February 1993.

The Academy unites several hundreds of leading scientists and specialists in electrical engineering, power industry, electronics including over 30 members of Russian Academy of Sciences.

One of the goals for the Academy is to consolidate efforts of scientists and higher school and sectoral researchers in close cooperation with Russian Academy of Sciences for defining and addressing



*Chairman of the Board of Directors of Izolyator Alexander Slavinsky has been elected Vice President of Academy of Electrotechnical Sciences of Russian Federation*

strategic growth objectives of the national economy of Russia.

AES consists of a number of scientific industrial branches covering principal disciplines in electrical engineering, power industry, electronic engineering, computer technology and telecommunications and being basic for such sectors as industrial manufacture, public transportation power supply, agriculture and social sphere.

PANORAMA

Direct Speech

DEAR COLLEAGUES!



Every time with the start of another year there are new opportunities opening for us. We make new plans and set ambitious goals.

Every year we try to develop keeping focus on our customers' requirements satisfaction.

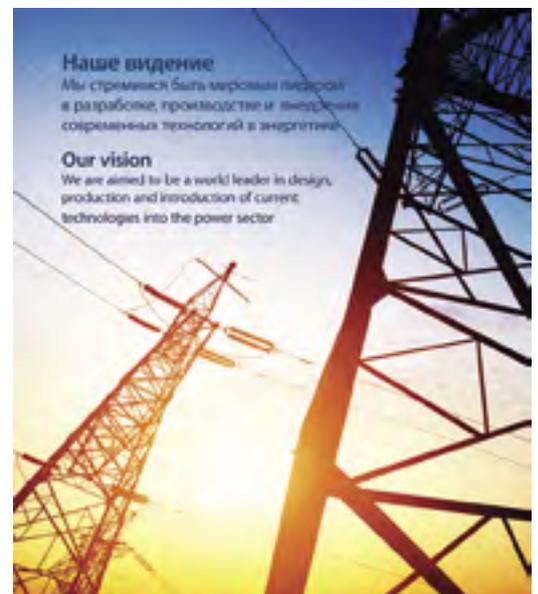
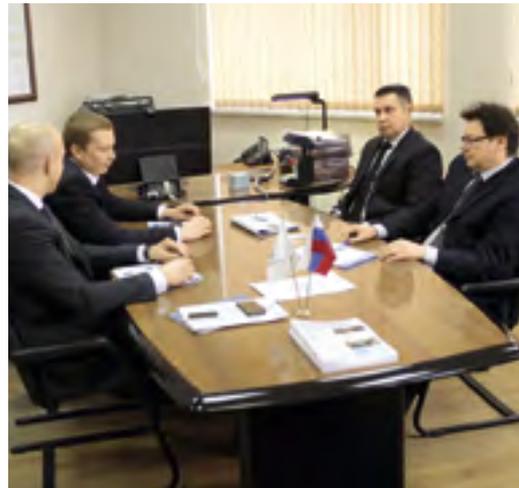
Our mission has never been as actual as today: "We create foundation for stable and sustainable power supply to entire society and every human being".

This year Izolyator team will apply maximum effort to support and existing partners and clients and reach out to the new ones all around the world.

We always strive to be a global leader in development, production and implementation of modern technologies in power industry – that is Izolyator's vision.



**Ivan Panfilov,**  
Commercial Director,  
1st Deputy General Director at Izolyator



PANORAMA



Direct Speech

**Our success key factor is mutually beneficial relations with suppliers**



Purchasing is part of commercial function activities at our plant. Our own product quality depends greatly on the materials and completing parts procured with ultimate effect on entire company efficiency.

Our management set maximum bottom-line efficiency a clear target for 2015.

The following objectives for purchasing activity of our commercial service are formulated:

- Supplier contracts terms renegotiation on mutually beneficial basis

- Stock optimization

To meet the objectives, we arranged meetings with foreign suppliers of materials and completing parts, where we achieved agreement on terms and conditions. Commodities stocks decreased almost twice.

In the second quarter, we plan to continue dialogue with representatives of materials, completing parts and service suppliers hoping to keep our partnership stable and long-term regardless of any market fluctuations.

We expect that our efforts will bring results helping our partners and us to achieve targets.



**Dmitry Abbakumov,**  
Deputy Commercial  
Director at Izolyator

## MEETING FSK UES REPRESENTATIVES



*A.Z. Slavinsky presents K.A. Lunin with a letter of recognition*

On 27 February 2015, a business meeting with FSK UES JSC representatives took place at Izolyator.

The briefing attendees were:

**FSK UES JSC:**

- Head of Power Equipment Production Technology Development **Kirill Lunin**
- Head of Department in Power Equipment Production Technology Development **Sergey Veniaminovich Berezinsky**
- Leading Expert of Power Equipment Production Technology Development **Evgeny Shapovalov**
- Leading Expert of Power Equipment Production Technology Development **Victor Sitnikov**
- Leading Expert of Power Equipment Production Technology Development **Ilya Dyadkin**
- Lead Specialist of Power Equipment Production Technology Development **Svetlana Zakirova**

**CECM UES JSC (Center for Engineering and Construction Management of UES):**

- Expert at Substation and ETL equipment department **Ivan Vydrankov**
- STC FSK UES JSC (Scientific and Technical Center of FSK UES):
- Head of Transformer Diagnostics Laboratory, **Yury Lvov**
- **Vladimir Bogomolov**
- Izolyator:**
- Chairman of the Board of Directors **Alexander Slavinsky**
- General Director **Sergey Moiseev**
- Commercial Director, 1st Deputy General Director **Ivan Panfilov**
- R&D Director **Konstantin Sipilkin**
- Technical Director **Alexander Shornikov**
- Strategic Sales Director **Alexander Savinov**

The meeting opened with Izolyator presentation of its history, products, development and international cooperation. The sides discussed current issues in the atmosphere of interest with a special emphasis made on advanced manufacturing technologies of bushings at Izolyator and joint activities in international cooperation development. K. A. Lunin was awarded a letter of recognition for his input in economic ties development between Russia and India.

Following the meeting agenda, the guests were invited to make a tour of the plant and familiarize themselves with modern technologies of high-voltage bushings manufacture and testing.

A number of important achievements and advantages of Izolyator was marked by the FSK UES representatives during the visit:

- High technical level of bush-

ings production by a Russian manufacturer

- Unique history of the enterprise's uninterrupted operation
- Ability to create bushings of high and ultra-high voltage types
- License to design and supply bushings to Nuclear Power facilities
- Solid track record in new products implementation for experimental and industrial operation
- Full range of services (design, maintenance, technical support during warranty and post warranty service)

Entire product range certification by FSK UES

Large amounts of Izolyator made bushings presently installed at FSK UES JSC including pieces with 30+ years in operation

Positive results of joint promotion on Indian market

Precedence among Russian suppliers in Power Grid Corporation of India Limited qualification with the right to export to India

Full eligibility to supply high-voltage bushings for the needs of leading international companies – manufacturers of electric power equipment

The following arrangements were agreed in the result of the meeting:

- Recommend Izolyator products for FSK UES facilities application
- Study a replacement program with FSK UES for old-fashioned bushings (over 30 years in operation) and bushings with outmoded types of internal insulation
- Continue joint promotion at international power markets
- Recommend Izolyator company listing among strategic enterprises in Russian Federation
- Take joint participation in supply of the first bushings shipment to India.

At the end of the meeting, an informative excursion to the Novo-Ierusalimsky monastery took place in the town of Istra.

# POWER GRID NETWORK OF RUSSIA



*At the 500-1150 kV assembly shop*



*At the Testing Center*



*At the insulation shop of Izolyator*



*Meeting of FSK UES and Izolyator representatives*



*Excursion to Novo-Ierusalimsky monastery*



*FSK UES and Izolyator – reliable partners*

## Direct Speech



## DEAR COLLEAGUES!

Quality improvement is a formula for success and development: both for product quality and management. Our company adheres to the principle and develops our partnerships with grid and generation companies on its basis.

It is worth mentioning a recent visit of executive specialists of FSK UES JSC, NTC UES JSC, CIUS headed by Kirill Lunin, Chief of Power Engineering Equipment Technology Dpt. The delegates marked a high level of production and localization and the fact that our unique facility is capable to create AC and DC bushings for entire range of voltage types from 20 to 1150 kV.

I am confident that the coming year will be rich in events and productive for our company!



*Alexander Savinov,  
Director  
of Strategic Sales  
at Izolyator*

# Izolyator is a reliable strategic partners of FSK UES

## FSK UES REFERENCE LETTER ON HIGH-VOLTAGE BUSHINGS BY IZOLYATOR

On 19 January 2015, FSK UES JSC sent a reference letter to Indian PowerGrid Corporation of India Limited concerning Izolyator 252

kV 2000A and 2500A RIP-insulated bushings that are operated in regional grids, branches of FSK UES.

In the document, FSK UES

confirms a high quality of Izolyator products and recommends the company as a reliable strategic partner.



*19.01.2015* № *РД-054*

To: Chief Manager, (CS-08),  
 Power Grid Corporation of India Ltd.,  
 Saudamini, Plot No.-2, Sector-25, Gurgaon-  
 122001, Haryana, India.  
 Tel. +91-124-2571700-19 ( Extn. 2348/3325 ) ;  
 Fax. +91-124-2571831.

Date: 19th January 2015.

Dear Gentlemen!

In the course of many decades, from the moment of appearance of Electrical Power Sector in Russian Federation and up to the present day **Massa LLC - IZOLYATOR factory** remains our regular supplier of high-voltage bushings for the needs of our Company. Below herewith we are kindly informing You on the list of HV bushings, rated **252kV/2000A**, **252kV/2500A**, with internal solid resin impregnated paper (RIP) insulation which have been developed, designed, manufactured, supplied, installed by **Massa LLC** during the period from **Y2005** till **December 2011** at the facilities of subdivision companies of **JSC Federal Grid Company of Unified Energy System (JSC FGC UES)**: MES of Northwest, MES of Urals, MES of East, MES of Center, MES of Volga, MES of Siberia, MES of West Siberia, MES of South and work satisfactory till now.

Type of Bushing	Factory drawing	Year of commissioning	Q-ty, pcs	Total Q-ty
252kV /2000A (transformer)	ИВYE 680353 115	2005- 2011	563	
	ИВYE 680353 113			
	ИВYE 680353 213			
252kV /2500A (transformer)	ИВYE 680353 213-01			
	ИВYE 680353 116			
	ИВYE 680353 114			
	ИВYE 680352 002			
	ИВYE 680352 003			
	ИВYE 680352 008			
	ИВYE 680353 110			
				563

We confirm hereby the high quality of the supplied products by **Massa LLC**, as well as a complete compliance with the requirements of **IEC 60137 standard**, **GOST 10693 standard** and normative documents. All high-voltage bushings mentioned above have passed successfully all type and routine tests and are successfully operating up to the present time. There have not been occurred any problem with installation, commissioning and maintenance.

A successful experience in development of the partnership relations between **Massa LLC** and **JCS FGC UES** allows to recommend **Massa LLC - Izolyator factory** as a reliable partner for manufacturing and supplies of the bushings for high (110, 220, 330) and extra-high voltage levels (420, 550, etc.).

**JSC FGC UES** confirms herewith that **Massa LLC - Izolyator factory** is a strategic partner, wishing You prosperity and further innovative development of Energy Transmission and Distribution in Russia and Worldwide!

Your sincerely,



Deputy Chairman of Board  
 Chief Engineer of JSC FGC UES

V. P. Dikoy

## FSK UES REPRESENTATIVES' VISIT

On 16 February 2015, representatives of FSK UES JSC, daughter company of Rosseti JSC visited Izolyator.

Vladimir Ustinov, Deputy Quality Director of Izolyator and Dmitry Ivanov, Head of Testing

Center acquainted the guests with modern technologies of HV bushings production and testing.

RIP-insulated bushing's design and operation feature received most attention.



At the 500-1150 kV assembly shop of Izolyator plant



At the insulation shop of Izolyator plant



FSK UES specialists are studying sensing lead construction



At the testing station of 20-150 kV bushings



External polymer insulation at the focus of attention



At the testing station of 220-1150 kV bushings

## Direct Speech

## DEAR COLLEAGUES!



In the first quarter of 2015, we adjusted our prices according to the market condition.

We carried on with shipments under 2014 contracts to our grid and generation customers in Russia, and began shipping bushings against 2015 orders.

The plant and our partners took part in tender procedures for supply of high-voltage bushings to Rosseti JSC, OGK, TKG and Concern Rosenergoatom branches.

We will apply utmost effort to ensure timely supply of our products.



**Oleg Bakulin,**  
Director  
of Partner Relations  
at Izolyator

## LENINGRADSKAYA NUCLEAR POWER STATION VISIT



*Izolyator's Director on Partner Relations visited Leningradskaya Nuclear Power Station, branch of Concern Rosenergoatom.*

On 26 March 2015, Oleg Bakulin, Director on Partner Relations, visited Leningradskaya Nuclear Power Station, branch of Concern Rosenergoatom.

The sides discussed issues on bushings operation and discussed nearest plans for replacement of outmoded designs. Izolyator will consider all comments and suggestions at next generation bushings design elaboration.

We wish to thank Concern Rosenergoatom represented by Leningradskaya Nuclear Power Station for invitation and warm welcome.



O.N. Bakulin at Leningradskaya Nuclear Power Station

## JOINT VISIT OF RETO PLANT AND MOESK REPRESENTATIVES



On 5 February 2015, Izolyator received Alexey Stepanyev, General Director of Zavod RETO JSC and Pavel Samylov, Chief Engineer of Central Grids of MOESK JSC. Alexander Slavinsky, Chairman of the Board of Directors at Izolyator and

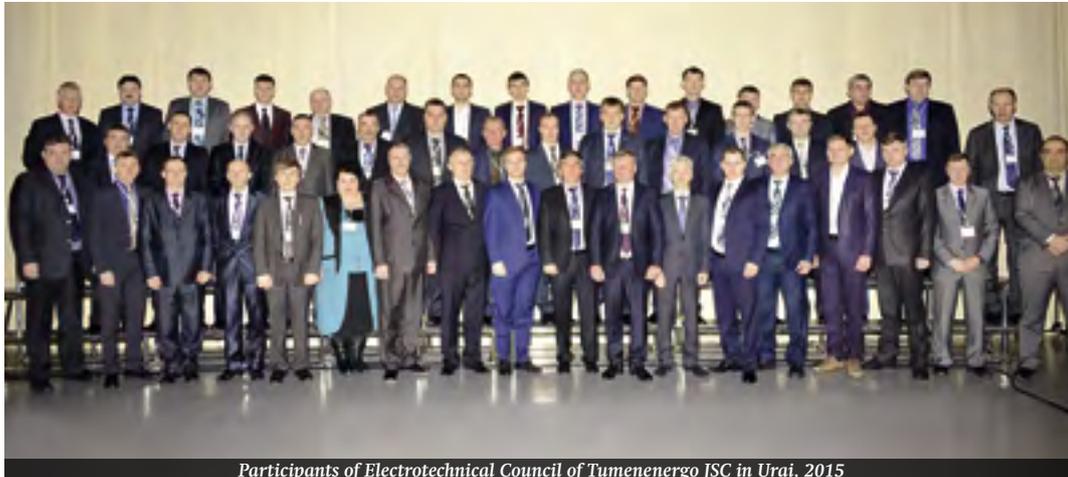
Konstantin Silpilkin, R&D Director welcomed the guests.

The visitors learned about modern technologies of HV bushings production and testing. The sides discussed cooperation plans for 2015.



At the 550-1200 kV assembly shop, left to right: P.V. Samylov, A.B. Stepanyev, A.Z. Slavinsky and K.G. Silpilkin

## ANNUAL ELECTROTECNICAL COUNCIL AT TUMENERGERO JSC



Participants of Electrotechnical Council of Tumenenergo JSC in Urai, 2015

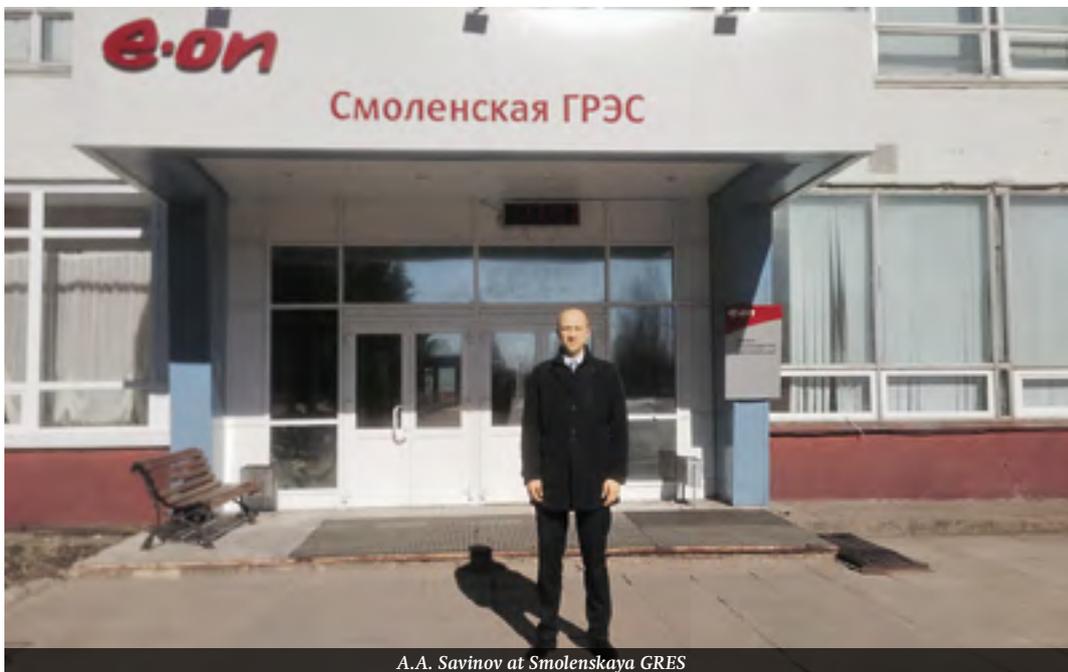
On 17–18 February 2015, Izolyator took part in annual Electrotechnical Council of Tumenenergo JSC in the town of Urai in Tumen region.

Oleg Bakulin, Director on Partner Relations, and Yury Nikitin, Chief Designer of Izolyator

represented the company at the Council. Mr Nikitin made a report “RIP-insulated bushings”.

We wish to thank Tumenenergo JSC for invitation to take part in the Electrotechnical Council sitting.

## VISIT TO SMOLENSKAYA GRES



A.A. Savinov at Smolenskaya GRES

On 17 March 2015 Alexander Savinov, Director of Strategic Sales visited Smolenskaya GRES and was welcomed by:

- **Alexander Peremibeda**, Chief Engineer
- **Nikolay Germanovich Lisitsyn**, Head of Electric Shop
- **Nikolay Fedorov**, Deputy Head of Electric Shop on maintenance
- **Stepan Zhakun**, Deputy Head of Electric Shop on operation

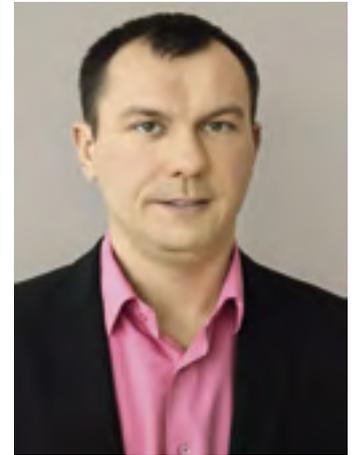
- **Alexander Gorelov**, Lead Specialist of Power Equipment department
- **Vitaly Shulenkov**, Foreman on Outdoor switchgear maintenance

At the meeting, A.A. Savinov presented Izolyator company, its products, new developments and advanced technologies used in design, production and testing HV bushings.

We wish to thank Smolenskaya GRES for invitation and warm welcome.

Direct Speech

## DEAR COLLEAGUES!



Izolyator is a reliable supplier of high-voltage bushings to the CIS countries! Our company focuses on building long-term relations with end-users of equipment.

Izolyator pays much attention to equipment operators training by organizing in-house or client premises based technical seminars. Our main goal for the training is to inform our consumer timely on all implemented innovations, which influence operation and maintenance of new bushing designs that differ dramatically from oil-in-paper insulation.

In the long years of the plant's cooperation with the CIS countries customers Izolyator retained reputation of a reliable supplier of durable equipment.



**Maxim Osipov**,  
Head of CIS sales

## Direct Speech



## DEAR COLLEAGUES!

Working with OEMs has always been an extremely important direction for Izolyator so today we can state that Izolyator is the biggest supplier of HV-bushings to the largest power engineering companies of Russia. Since early 2015, our enterprise has run meetings with Power Machines – Toshiba. High-voltage transformers, Sverdlovelectro Group (SVEL), Uralelectrotyazhmash where we discussed partnership development and plans for 2015. We held a technical seminar at the premises of SVEL.



**Maxim Zagrebin,**  
Head of OEM Sales of Massa Ltd.

## VISIT TO SVEL – POWER TRANSFORMERS PLANT



Foto from Svedlovenergo Group webpage

On 19 February 2015, **Maxim Zagrebin**, Head of OEM Sales at Izolyator visited SVEL – Power Transformers Ltd. at Yekaterinburg.

An introduction to Andrey Shmakov, the new Head of Purchasing Department was made. The sides discussed plans for 2015 and agreed to organize a semi-

nar for technical specialists at the plant in March 2015.

We wish to thank SVEL-Power Transformers for invitation and warm welcome.

## SEMINAR FOR SPECIALISTS OF SVERDLOVELECTRO GROUP (SVEL)



Seminar work

On 27 March 2015, Izolyator organized a technical seminar for specialists of SverdlovElectro Group (SVEL) in Yekaterinburg.

SverdlovElectro Group is one of the leading Russian manufacturers of power equipment. In its turn, Izolyator is a sole Russian maker of high-voltage bushings of 10 to 1150 kV voltage classes.

**Maxim Zagrebin**, Head of OEM Sales and **Victor Kiryukhin**, Head of Design bureau of Advanced Design Technology center at Izolyator ran the seminar.

Both technical specialists and commercial specialists of SverdlovElectro Group attended the seminar.

Considering the fact that Izolyator organized the technical

seminar for SverdlovElectro for the first time, our specialists gave a detailed outline on design, operation and diagnostics features of the bushings. Seminar participants learned about century-long history of Izolyator plant and made a virtual tour of the plant's production. SverdlovElectro Group specialists received an opportunity to ask questions discuss issues of interest with the leading specialists of Izolyator company.

We wish to thank SverdlovElectro Group for invitation and seminar organization.



M.I. Zagrebin conducts the seminar

## POWER ENGINEERING INDUSTRY IN RUSSIA AND CIS



Foto from Uralelectrotyazhmash webpage

## URALELECTROTYAZHMASH PLANT VISIT



On 19 February 2015, **Maxim Zagrebin**, Head of OEM Sales at Izolyator visited Energomash JSC (Yekaterinburg) – Uralelectrotyazhmash in Yekaterinburg.

The sides discussed cooperation plans for 2015 at the meeting.

We would like to thank Uralelectrotyazhmash plant for invitation and warm welcome.

## VISIT TO POWER MACHINES – TOSHIBA. HIGH-VOLTAGE TRANSFORMERS»



On 20 March 2015, **Maxim Zagrebin**, Head of OEM Sales visited Power Machines – Toshiba. High-Voltage Transformers Ltd. In Saint Petersburg where he was received by:

- **D.A.Morozov**, Head of Procurement
- **Andrey Sidelnikov**, Chief Designer

- **Victoria Dydykina**, Head of Design Department
- **Alexander Smirnov**, Lead Design Engineer

The sides discussed partnership development.

We would like to thank Power Machines – Toshiba. High-Voltage Transformers Ltd for invitation and warm welcome.



A.A. Smirnov (left) and M.I. Zagrebin at the Power Machines – Toshiba. High-Voltage Transformers Ltd plant



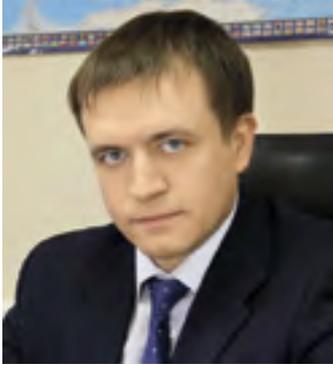
110 kV Izolyator bushings at the Power Machines – Toshiba transformer



220 kV Izolyator bushings at the Power Machines – Toshiba transformer

## Direct Speech

## DEAR COLLEAGUES!



In 2014, we made a strong start in business development with our Indian partners.

Last quarter we carried on with our activities in all major Power Industry sectors that include systems of generation, transmission and distribution of electricity.

We are building trustworthy and long-term relations with Indian partners – an important activity with no right to fail. The team works out organizational, commercial, technical, legal and other aspects of effective cooperation that would eventually lead us to mutual success and strengthening of friendly ties between Russia and India.

Next quarter of this year, we will as actively develop cooperation with companies of India and identify optimal forms of partnership for the prosperity of our countries.

I wish to thank all our Indian partners for active and interested position combined with a will to make concessions and cooperate in a solid business union.

My special thanks to Dr. Ashok Singh whose untiring energy, absolute competence and true benevolence prove an invaluable help in our common goal.



**Andrey Shornikov,**  
Sales Channel Leader in sales  
department of Izolyator

## Business trip to India

On 4-7 February 2015, Ivan Dmitrievich Panfilov, Commercial Director, Deputy General Director and Pavel Viktorovich Kiryukhin, Deputy Chief Designer paid a business visit to India. Dr. Ashok Singh, Chief Representative in India of Mass Ltd. kindly arranged organizational side of the visit.



Left to right: I. V. Panfilov, P.V. Kiryukhin and Mr. Richik Manas Das

*PowerGrid is one of the biggest power grid companies in the world and is structurally related to the Ministry of Power Energy of India. The company plays leading role in power supply to all country regions and Power Sector economy development taking part in major Government programs.*

2015 began with good news for Izolyator company. We won tender for supply of RIP-insulated bushings (550, 220 and 110 kV) for PowerGrid Corporation of India Limited (PowerGrid) as completing part for Crompton Greaves(CS) transformer.

It is necessary to emphasize the fact that the transformer will be installed in Delhi, the capital of India.

It is an important achievement for Izolyator that can be marked as the first practical result of our work in 2014.

After announcing us winners in the tender PowerGrid set a number of technical questions on RIP-insulated bushings, hence the visit for detailed project discussion of Izolyator team was immediately confirmed.

During the trip we met several representatives of PowerGrid:

- **Mr. Richik Manas Das**, Senior Design Engineer ( Engg. -S/S )
- **Mr. Rajil Srivastava**, Deputy General Manager ( Engg.-S/S)
- **Mr. S.B.R. RAO**, Chief Manager, Technology Development

The parties worked out all technical issues and agreed on further cooperation.



Left to right: Mr. S.B.R. RAO, Mr. Rajil Srivastava, I.D. Panfilov, P. V. Kiryukhin and Mr. Richik Manas Das

## WORLD ARENA

*NTPC Limited is the largest state-owned energy company established in 1975 with a purpose of accelerating development of power economy in India. Overall installed capacity of the power plants including joint ventures corresponds to 43128 MW.*

*The company set a target of 128000 MW of total installed capacity by 2032, which will come from diverse sources of energy: 56% – coal, 16% – natural gas, 11% – nuclear energy, 17% – renewable energy.*

After meeting at PowerGrid, I.D. Panfilov and Dr. Ashok Singh visited generation company NTPC Limited where they met with Mr. A.K. Jha, Technical Director.

The meeting was highly productive and Izolyator presented its power industry record of accomplishment again, especially

its long-term cooperation with generation facilities in Russia and other countries.

Both sides concluded that NTPC Limited ambitious goals

in generation development in India and Izolyator experience in development, supply and service of HV bushings with RIP insulation are a good platform

for taking cooperation further exchanging experience and developing partnership between India and Russia on the world level.



*I. D. Panfilov and Dr. Ashok Singh at NTPC Limited*



*Museum and store MIITTAI TEA HOUSE (8-a Main Market, Lodhi Coloni, New Delhi ([www.mittalteahouse.com](http://www.mittalteahouse.com)) Mr. Kesha Kant Mittal*

We wish to say special thanks to our partner Dr. Ashok Singh for his valuable support to Russia-India relations development. It is a wide-known fact in Russia that India is not only a leading country on the international arena but also a country that grows and produces wonderful tea. During our visit, Dr. Ashok Singh organized excursion to a tea museum and shop which helped us learn a lot on sorts of tea, ways to make tea and consume. Truly, India is a country of immense opportunities, culture and traditions.

## Direct Speech

## DEAR COLLEAGUES!



In the first quarter of 2015, we bottom-lined our 2014 activities and outlined our plans for the year.

Vietnam is an important new destination for our business development. Another priority – Europe, where we keep an active cooperation with many countries.

A growing partnership between Russia and Vietnam concerning Power industry came as a signal to set up contacts with OEMs of completing equipment and power utility companies of Vietnam.

An important outcome of 2014 is the first order from Dong Anh Electrical Equipment Corporation JSC for of 72.5 kV and 126 kV HV-bushings supply. It is a strategically important contract for Izolyator as it marks the beginning of long-term relations with all players on the power market of Vietnam.

Such companies as Alstom, Siemens and Crompton Greaves remain strategic partners of Izolyator. Our status on 110 kV switchgear bushings and introduction to Izolyator plant became the topics that we discussed during Alstom representatives visit. Both sides reconfirmed interest in continued cooperation and business development.

Another important activity in Europe is our contacts with European grid companies, such as TERNÀ, ENEL (Italy), ELIA (Belgium).

In the first quarter of 2015, we actively interacted with Terna – Rete Elettrica Nazionale S.p.A. setting up contact and receiving accreditation. This Italian company owns and operates power grids in Italy.

We are active in our joint project with Crompton Greaves in ELIA, Belgium with a view of orienting the market of the country to RIP-insulated bushings technology.

Also in 2015, we look forward to cooperate with the countries of South and Latin America, new market to our company, starting with the region study together with marketing department colleagues.

Summing up results of the first quarter, I would like to say that we made a successful start in our work, which we plan to continue in the same active approach reaching our targets, building stronger relations with clients and partners and sourcing new opportunities for business development.



**Natalia Mazova,**  
International Business  
Development Manager

## Business meetings

Representatives and partners of Izolyator in Vietnam Mrs Mac Thi Vinh Phu and Mr Le Anh Hien visited power corporation EVN and its daughter companies, and Dong Anh Electrical Equipment Corporation JSC transformer plant on 19–25 March 2015.

On 19 March 2015, meetings with state-owned EVN Hanoi and EVN NPT took place.

*EVN Hanoi is in charge of power transmission in Hanoi.*

Participants:  
Mrs Vu Kim Huong – Head of International relations

In the course of meeting, Izolyator partners presented the company and products and discussed cooperation prospects.

EVN Hanoi expressed interest in further talks with Izolyator and stressed necessity of a technical seminar and experience exchange in the power equipment operation and maintenance.

EVN NPT is one of the most important partners for Izolyator company.

*EVN NPT controls 220 to 550 kV power transmission EVN NPT divides into of NPT1, NPT2, NPT3, NPT4*

EVN NPT received complete information about Izolyator and its product range at the meeting.

In the result of it, we learned key facts about our partner-company, organizational structure,

and tender system for equipment procurement.

EVN NPT confirmed its intention to cooperate with Russian manufacturer – Izolyator company.

On 24 March 2015, a meeting with Dong Anh Electrical Equipment Corporation JSC transformer plant took place.

*Dong Anh Electrical Equipment Corporation JC (EEMC) Founded 26 March 1971 One of leading manufacturers of power equipment in Vietnam and South-East Asia in 220 – 500 kV transformers production*

Participants:  
Nguyen Viet Anh, Head of Materials Department

Nguyen Van Chung, Engineer  
Izolyator representatives in Vietnam Mac Thi Vinh Phu and Le Anh Hien

The meeting results:

Dong Anh Electrical Equipment Corporation JSC confirmed its interest and 100% intention to develop long-term cooperation with Izolyator company.

As confirmation of that intention, the Board of Directors of the company gave an instruction to entire company staff of Dong Anh Electrical Equipment Corporation JSC to support cooperation with Izolyator as a Russian manufacturer.

A trial order received for test batch of 72.5 kV and 110 kV bushings to carry out testing on Dong



*Mac Thi Vinh Phu, Le Anh Hien, Nguyen Viet Anh and Nguyen Van Chung at Dong Anh Electrical Equipment Corporation JSC plant*

## in Vietnam



At EVN NORTHERN, left to right: Mrs. Mac Thi Vinh Phu, Mrs. Ha Thi Minh Hue and Mr. Le Anh Hien



Mac Thi Vinh Phu in EVN NORTHERN

Anh Electrical Equipment Corporation JSC transformers

An enquiry received for supply of leading-in bushings of 110 kV type

On 26 March 2015, Dong Anh Electrical Equipment Corporation JSC celebrates 44 years since its foundation in 1971.

We would like to congratulate the company and staff with this celebration.

24 March 2015

Meeting with EVN NORTHERN

Participants: Mrs Ha Thi Minh Hue – Head of International Relations

25 March 2015

Meeting at EVN Head Quarter

Participants: Mr Giang – Deputy Head of International Relations

Meeting results:

The partners confirmed their interest in technical seminar.

Izolyator must focus on EVN NPT whose area of responsibility is 220–550 kV grids.

*EVN NORTHERN controls power transmission covering 27 provinces and cities in the northern part of Vietnam.*

*The company concentrates on 110 and 220 kV grids for key economic zones this year.*

*In 2014 total investment volume in power infrastructure amounted to 9 059 trillion VND. EVN NORTHERN is a managing company that evaluates tenders and projects, enters top 5 companies in EVN structure.*

In the result of meetings, all sides confirmed interest in continued cooperation and expressed intention to exchange experience between Russia and Vietnam.

We would like to express our gratitude for all participants of the meetings.

## ALSTOM REPRESENTATIVES' VISIT




At the insulation shop of Izolyator plant, left to right: V.V. Ikonnikov, P.V. Kiryukhin, R. Strabler, N.E. Mazova and M. Banovic

On 24 February, Izolyator received visitors from Alstom:

- **Roland Strabler**, Project Manager
- **Miroslav Banovic**, Technical Project Manager
- **Vladimir Ikonnikov**, Project Manager

**Pavel Kiryukhin**, Deputy Chief Designer and **Natalya Mazova**, Channel Sales Lead-

er at Izolyator welcomed the guests.

The sides discussed the joint 110 kV switchgear project for Alstom's gas-insulated substation for Yakutsk GRES of RusHydro JSC.

The guests acquainted themselves with modern technologies of production and testing of HV bushings.

## JOINT VISIT OF NPO VEI ELECTRICINSULATION JSC AND WAYLUNG PLANT

On 26 March 2015, Izolyator received visitors from electric engineering plants:

**NPO VEI Electricinsulation JSC:**

- **Sergey Snegirev**, Operation Director
- **Waylung plant, Chinkiang, China:**
- **Zhou Fenghui**, Head of International Cooperation dpt;
- **Gong Chen**, Deputy Chief Engineer;

- **Song Bangshen**, Deputy Chief Engineer.
- **Alexander Slavinsky**, Chairman of the Board of Directors welcomed the guests.

The parties discussed cooperation opportunities concerning completing parts to switch-gears.

The guests learned about modern technologies of HV-bushings design and production.



At the Testing Center of Izolyator plant, left to right: S.V. Snegirev, Zhou Fenghui, Sog Bangshen, Gong Chen and A.Z. Slavinsky

Direct Speech

**DEAR COLLEAGUES!**



Last quarter we started actively analyzing economic situation in Brazil and new developments on the global market in general. We identified Power Grid majors on the market of Brazil and sourced key facts about those companies. Next quarter we will finalize our marketing assessment in order to formulate our strategic goals and nearest action plan for that market.

One of activities that we indulged in is communicating to our European partners our current developments at Izolyator including an attractive pricing policy thanks to the existing situation in Russia. We maintain telephone contact with many transformer plants.

Our marketing team works in close contact with colleagues in Sales and it is beneficial for both our worthy partners and us to receive immediate feedback on quality of our work.

We look forward to the future and sustain our optimism with hard and professional work.

**Yaroslav Sedov,**  
Marketing Executive  
of Izolyator

**Power Stations Magazine #2/2015 published an article “Russian high-voltage bushings: more than 80 years of history” that was prepared by a group of authors at Izolyator.**

High-voltage bushing is an important element of any generation, transmission and distribution system. This element’s design perfection and technical characteristics have direct impact on reliability of power equipment and consequently uninterrupted power supply to end user.

High-voltage bushing as an independent field of power equipment design in Russia has gone through a long evolution, closely linked to national electric engineering school development and realization of countrywide power construction projects. Since 1932 the history of HV bushings in Russia is inextricable connected with Izolyator company.

The article introduces us to a short chronology of homemade high-voltage bushings and main technical stages in their development.

**Российские высоковольтные вводы: более 80 лет истории**

- **Славинский А. С.**<sup>1</sup>, доктор техн. наук, Компания “Изолятор”, Московская обл., Павловская Слобода.
- **Савельев К. Г.**, Компания “Изолятор”, Московская обл., Павловская Слобода.
- **Никитин Ю. В.**, Компания “Изолятор”, Московская обл., Павловская Слобода.

Как самостоятельное направление электроэнергетики в России, высоковольтный ввод прошел длительный путь эволюции, тесно связанной с развитием национальной электротехнической школы и реализацией крупнейших энергетических проектов федерального значения. Статья посвящена в краткой хронологии существования высоковольтных вводов и основным техническим этапам совершенствования их конструкции.

**Ключевые слова:** высоковольтный ввод, история, вводы, изоляторы, КВВ-вводы, ВН-вводы, вводы, компания “Изолятор”, трансформатор, напряжение, поставщик, разработка, проектирование, КВВ.

Высоковольтный ввод является важнейшим элементом любой системы производства, передачи и распределения электроэнергии. От совершенства его конструкции и уровня технических характеристик энергооборудования зависит надежность работы энергоустановки и, как следствие, бесперебойность подачи энергии на конечному потребителю.

Как самостоятельное направление электротехнической инженерии в России высоковольтный ввод прошел длительный путь эволюции, тесно связанной с развитием национальной электротехнической школы и реализацией крупнейших энергетических проектов федерального значения.

Исторические события, предпринятые инженерными организациями высоковольтных вводов, эти разработаны в 1920-е. Государственный план электрификации России – план ГОЭЛРО. План был рассчитан на 10 – 15 лет и основан на построении национальной энергетической системы, обеспечивающей за счет роста собственного энергопотребления [1].

Наряду с другими масштабными мероприятиями, план ГОЭЛРО предусматривал строительство высоковольтных линий электропередачи (ЛЭП) с их последующим объединением в единый энергетический систему страны. В 1921 г. Правительство СССР назвало государственной задачей «Изолятор» создание предприятий по изготовлению и монтажу изоляторов для ЛЭП высоковольтных напряжений. К этому времени предприятие, основанное в 1880-е гг., уже являлось производителем и поставщиком электротехнических фарфоровых изделий.

Дополнительно известны два основных периода успешных производств изоляторов сложной конструкции – высоковольтных вводов, до этого

использовались на территории 1 февраля 1912 г. на “Изолятор” были собраны и успешно испытаны три ввода с маслобрызковой изоляцией (МБИ) на напряжение 115 кВ для трансформаторов [2].

Первые вводы были изготовлены методом из термостойкого фарфора. Находясь особым выделением вводов 115 кВ для Московской электростанции.

С этого события история развития высоковольтных вводов в России будет неразрывно связана с компанией “Изолятор”, которая до 1990-х годов являлась единственным производителем и поставщиком высоковольтных вводов для отечественных электростанций и крупных предприятий страны и ближнего зарубежья.

Строительство Кольской Сверхвысокой ГЭС и Ленинградский обл. электростанция передела электростанций страны и ЛЭП на напряжение 220 кВ. Ввод “Изолятор” получил задание изготовить термостойкое изделие, и в декабре 1932 г. была изготовлена и успешно испытана на Всероссийском электротехническом институте (ВЭИ) опытный образец ввода на 220 кВ. В мае 1935 г. были выпущены первые 15 серийных вводов для Сверхвысокой трансформаторов и масляных высоковольтных Сверхвысокой ГЭС (рис. 1).

В 1933 г. термостойкий “Изолятор” была поставлена задача переоснастить вышедший из строя ввод Зиндель-Швабский на напряжение 300 кВ, установленный на испытательном трансформаторе ВЭИ. В процессе ремонта вводов в стране была изготовлена фарфоровая термостойкая типовой ввода и опыт большого диаметра. В начале ноября 1933 г. ввод был собран и сдан ВЭИ.

В январе 1934 г. на “Изолятор” была разработана и изготовлена ввода для ЛЭП в СССР трансформаторов на напряжение 134 кВ для Ленинградского ГЭС. Непосредственно ввод на это напряжение выпускался серийно.

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# Production Calendar

## 6 June

119 years of Izolyator

APRIL						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				