

The Situation with the Non-Conformity in Testing Procedure

On May 23, 2018, NGK Insulators, Ltd. (“**NGK**”) issued a press release entitled “Non-Conformity in Testing Procedure.” As explained in this press release, NGK confirmed in January this year that, with respect to certain electric power products such as insulators (the “Target Products”), we did not properly implement the delivery tests as prescribed by customers contracts. We immediately started confirming the product quality, working to implement preventive measures for reoccurrence of any similar events, and endeavoring to rebuild trust in NGK and its products.

There have not been any new problems that are different from the contents of our May 23 announcement. However, we would like to announce as follows the progress with customer communications and the measures to prevent reoccurrence.

We believe that it is essential for us to conduct a thorough review of our corporate culture in view of this opportunity. In addition, we believe that it is necessary to carefully deal with the compliance with laws and regulations of various countries as well as any issues under individual contracts by receiving advice from our legal counsels, because we operate our insulators business internationally. As part of our ongoing investigation, we have been working to review and improve our corporate culture concerning delivery tests in accordance with the testing specification prescribed by the contracts, and to work with our customers to rebuild their trust in NGK and its products through discussions.

As described in our May 23 announcement, we conducted comprehensive inspections of all products throughout the group, but no new incident that is different from the contents of our May 23 announcement has been found.

[Customer Relations]

We are actively working with many customers to address their questions about product quality of the Target Products, performing re-testing in certain instances.

We have explained to all 133 of our 141 domestic customers to whom we have any sales record in FY 2017, excluding 8 companies with respect to which we have found no non-conformity. In addition, we also explained to 100 customers, including end users of the products we sold to distributors, to which we have any sales record in 2016 or earlier.

Meanwhile, overseas customers have been notified through trading companies and web sites. We have already had one-on-one discussions with 37 out of 81 overseas customers and we will further make progress as appropriate. With advice from our legal counsel, we are carefully dealing with the laws of each country and issues of individual contracts.

Some of our customers are still confirming whether there are problems with product quality and safety, but, so far, we have not heard from customers that they found problems with product quality or safety.

In addition, we have shifted to performing delivery tests in conformity with contracts in general, after confirming that we had not previously performed the delivery tests as prescribed by contracts with customers. In some instances, however, we shipped to customers with their consent such products that are only confirmed to meet the internal standard of our company.

[Cause and background of occurrence]

We believe that underlying the non-conformity issues was an internal motivation to make the tests more efficient. In revising the tests stipulated in the contract, we should have explained to customers that the revised testing methods are comparable and adequate to ensure product quality, and should have requested for amendment of the contract concerning the tests. We also believe that the background of such compliance problems was solid confidence in the quality of our insulators manufacturing process that we have been the top manufacturer of insulators. In our view, test results and process control values in the manufacturing process have sufficient margin to the specified values that are stable among our production lot, and there are products with respect to which our unique defect detection tests, stricter than the delivery tests, are conducted fully on all products. We recognize that such have been the reasons why we undervalued the test reports, leading to our use of different testing conditions, insufficiency of the number of samples for sampling tests and non-conformity of conducting tests by alternative method.

In addition, we believe that there were structural issues that led to confusion about which department would be responsible for ensuring the testing specification as prescribed by the customers. Specifically, the manufacturing department and the inspection and quality assurance departments were integrated, which obscured the distinction of the positions, where such integration took place when a part of the delivery tests was incorporated into the line in connection with the advancement of the automatic line in the manufacturing process.

Our legal counsels' investigation is still ongoing, which includes document-based investigation dating back many years and interviews of relevant persons. However, we have learned through our investigation so far that the division involved in the delivery tests of the Target Products had a way of thinking that undervalues contracts such as that "the tests conducted in accordance with our company's internal standard are sufficient." These are clearly inappropriate ways thinking, which our company considers to be a serious problem.

For a number of decades, similar products were manufactured by the same manufacturing process, which was properly performed and managed. No accidents or complaints are known to have occurred at the customers' site due to the non-conformity with the testing specification prescribed by the contracts. We also had been overly confident about the quality of our products. For such reasons, sufficient attention may have not been paid to contracts. In addition, even in the internal audit under ISO 9001, we focused on whether or not the individual operation was carried out as prescribed, not conducting an audit of the entire operational process. We now

recognize that we did not previously have any “mechanism to audit the conformity with the contract.”

With regard to the insulators business, we recognize that our belief that we are the best in world led to our overconfidence and that personnel were engaged in the same business for a long period of time, which resulted in complacency with the allocation of personnel and scrutiny of our daily work. In some instances, we confirmed a lack of communication between each department, including sales, manufacturing, testing, and shipment, which we consider as one of the reasons that caused the non-conformity.

With regard to quality, because delivery tests had been carried out based on our internal standard that was designed with the goal of achieving sufficient strictness, and there were no accidents in the market or large complaints known to have been caused by the non-conformity with the testing specification prescribed by the contracts, we became careless, resulting in a mistake about undervaluing the conditions required under individual contracts. We reflect that this is a serious problem.

[Measures to prevent recurrence]

We are working on measures to prevent recurrence so that such problems will not occur again.

As our general corporate structure, our quality assurance and activities are independent from the Business Groups and the Quality Management Department belonging to the Head Office conducts guidance and audits throughout our company. In each Business Group, a quality assurance department, which is a separate department from the business divisions conducting business activities in each business group, is in charge of quality assurance. We consider that one of the causes of this event had been that, unlike quality assurance departments in other Business Groups as described above, the department in charge of delivery tests was not under the control of the quality assurance department of our Power Business Group but under the Insulator Division, which is the business division conducting business activities. Regarding this, we have reviewed the structure by changing the organizational structure last April. Specifically, at the same time as transferring the responsibility of delivery tests to the quality assurance department of the Business Group, which is a separate department from the business division, we added a function to the quality assurance department to confirm that the tests are conducted as prescribed by the contract and changed to a business process flow that products cannot be shipped without review of the delivery tests department.

Also during last April, we revised our internal regulations (basic regulations on quality activities) and clarified the quality compliance obligations of our officers and employees. In addition to clarifying the quality compliance obligation of officers and employees, our internal regulations after such revision also revised items as to ensure familiarization and implementation of education, procedure upon discovering any violation, monitoring, internal audit, regulations for preventing violations, conservation of reference materials and documents, and disposition to offenders.

Although we have strived to improve quality through the Quality Management Department's audit of and instruction to each quality activities, we reflect that the audit was not sufficient from the viewpoint of quality compliance. Therefore, in order to eliminate any barriers between each department such as sales, engineering and manufacturing departments, and ensure that the entire company is thoroughly committed to quality, we will proceed to implement the following and other measures.

- Direct supervision of quality activities and quality committees by the top management and enhancement of dissemination of information valuing quality;
- Strengthening of the structure of the quality committee led by the top management;

(Add the president of our company and the department manager who grasps the operational process of each business as new members to the quality committee, which has consisted of quality chairperson, officers of our Head Office, group executives and head of quality of Business Groups, while also increasing the frequency of the meetings from twice to four times a year)

- Thorough quality education for management and employees;

(Quality education for executives: once a year; seminar by outside lecturer to officers and department heads: once a year; education by the Quality Management Department and Group Compliance Department to employees: as needed)

- Enhancement of quality assurance department of Business Groups (approximately 50 people);
- Extend quality activities to “quality of operation” in addition to “product quality”;

(Strengthen quality activities in accordance with the quality control guideline established by industry groups through visualizing the weakness in integrity activities by (1) self-evaluating operation quality and analyzing the weaknesses of the quality of operation and (2) designing measures for improvement and reviewing business operation.)

- Structuring of a quality compliance program;

(Work to extend the operation of Quality Management Department in our Head Office, thoroughly inform the quality compliance and implement education, monitor operation by our business divisions and strengthen audits, respond to violation, and implement and apply regulations and rules, etc.)

- Strengthening of audit system for quality control;

(Newly add unannounced audits of the business division by the Quality Management Department and the Group Compliance Department, in addition to the external and internal audits under ISO, which had been the only audits we conducted, and enhance the traceability control of quality data)

- Appointment and clarification of responsibilities of persons who are responsible for quality and contracts;
- Improvement of quality control provisions at group companies;

We are currently taking steps to implement a system throughout our company that data related to product quality such as test data will be automatically collected and processed as electronic data so as not to involve employee discretion. Additionally, in order not to weaken the quality assurance department by overly prioritizing cost-cutting shortcuts, we will review the quality assurance organization under the business divisions, increase the number of personnel, and maintain job rotation program.

Again, we should have explained our testing approach with customers in advance, and discussed contractual terms as necessary before they were entered. We recognize that our mistake resulted from solid confidence in our quality. For this reason, we will also strengthen education from the viewpoint of conformance with contracts. Furthermore, the Quality Assurance Department of our Business Group, which is a separate department from the business division, will conduct the final review of the matters prescribed by the contract upon shipping and, for large-scale contracts and extraordinary contracts, responsible personnel of each of our Business Groups and the heads of financial, legal and quality assurance departments of our Head Office will hold a meeting (contract review) and check whether the details of the contract will impose business risk upon us, as part of which our Quality Management Department of our Head Office will also review the technical aspects of the contract.

Our corporate culture may have led to the non-conformance issues in that it could have been difficult for our employees at worksite to immediately present problems to their superiors. We take this issue seriously and believe it is management's responsibility that failed to make all members of the group aware of the importance of compliance.

Based on such recognition, in addition to revising and implementing rules as well as strengthening management, our Legal Department and Group Compliance Department will educate all departments about the importance of complying with laws and regulations, including the conformance with contracts. Furthermore, by utilizing the certification system of the internal reporting system to reexamine the institutional design based on the examination standards, we will work to further enhance the internal reporting system, and detect any event of quality compliance problem and other problems at an early point in time. We are also currently rebuilding our corporate philosophy as part of the reform of our corporate culture.

We will continue to state, at every available opportunity, our top management's determination to comply with laws and regulations as well as the significance and importance to our company of contract compliance, product quality and putting customers first. We will send out such message to our entire group to ensure thorough compliance with laws and regulations to spread the idea of valuing "safety, quality, environment and CSR," which is the basics of business operation, in order to shift to a more transparent corporate culture. We will continue to strive to achieve these goals.

[Future response]

Based on the result of review of manufacturing process, quality control system and other matters so far, our current view is that our products have sufficient quality. Also, at present, there is no fact that compensation for the damage of or replacement of products is requested.

If any important matters arise that require disclosure, we will promptly disclose such matters.

As the intention of our management, we are strongly determined to thoroughly review our corporate culture at this opportunity.

In addition, because we are engaged in international business for a long period of time, we are checking the laws and regulations of various countries and confirming the details of individual contracts with the advice from our legal counsels in Japan and overseas. We consider that we need to continue to carefully deal with the procedural aspect of this event taking into account the laws of each relevant country. Once all dealings concerning this event end, including the above, we plan to appropriately discipline the relevant personnel based on our internal rules.

[ISO]

As disclosed on our website on June 27, in response to this event of non-conformity, we received a notice of temporary suspension of ISO 9001 certification for insulators as of June 21, 2018 (temporary suspension period: June 22 to December 21, 2018).

We will make an all-out effort to have the temporary suspension of registration be lifted at an early date after an extraordinary surveillance of our measures to prevent recurrence and other relevant items by JIC Quality Assurance Ltd. (ISO certification body).

End