Use of information systems in gas sales in the company enables business processes run faster. The problems that exist in PT. Indoturbine include the decrease of sales value, due to non updated data, and the difference gas compressibility factor between TCP (Turbine Control Panel) and SCP (Station Control Panel). These problems are cause the loss of profit in Indoturbine.

This study has three main objectives that include the following: (1) to analyze security performance all of infrastructure unit in gas sales information system for electrical security, physical security, and procedure; (2) to analyze the level of performance and importance that support the security of gas sales information system after integration using IPA analysis; (3) to provide solutions to PT. Indoturbine for improving gas sales performance in order decline from gas sales target.

The aspects that are used in the safety assessment system include electrical security, physical security, and procedures. The method used in this research is descriptive with primary data collection through questionnaires and interviews, as well as some secondary data in the form of documents that could support this research. Sampling was conducted in respondents' judgment sampling with a purposive sampling method. Collected data is processed using IPA analysis and Ishikawa diagram.

Results of this study found that the electrical aspects of security have the biggest role in the decline in the value of gas sales. This is caused due to the differences in the calculation base on TCP with SCP, the unavailability of passwords for relief operator, inadequate battery banks to support the infrastructure of existing information systems, and the unavailability of SOP in Indonesian language.

The conclusion of this research is that even though all working units in Indoturbine has performed well, the integration of TCP and SCP introduced new unexpected problems, mainly on the decline of gas sales profit. Some repairs need to be done especially on the problem of base calculation that which should be adapted to the existing SOP. This may be different for engineering calculations are not adapted to the condition of the equipment in the field. Our recommendation is that the similar study of our research must be also conducted to other divisions in Indoturbine to figure out the overall problems and seek for the best solutions.

Key words: information system security, IPA, Ishikawa