

Monitoring and fault diagnosis of LNG fractionation process

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LNG, the most common clean energy, has been consumed increasingly. Moreover it is expected to be over 50% of total energy source after 2030. Therefore, it is necessary for efficient monitoring and diagnosis system of LNG plant. In this study, four steps methodology for monitoring and diagnosis are suggested; monitoring method based on PCA, fault propagation, fault magnitude and event analysis.

This suggested methodology is demonstrated to application to LNG fractionation process. As a result, the application of this methodology has rapid detection and accurate performance compared to previous univariate monitoring system.

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