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TALK ON
CONDITION AND LIFE ASSESSMENT OF IN-SERVICE POWER TRANSFORMER

(Organised by Oil, Gas & Mining Technical Division and Electrical Engineering Technical Division, IEM)

BEM Approved CPD/PDP Hours: Applying

Date : 21st January 2017 (Saturday)
Time : 9.00 am to 11.00 am *(Refreshments will be served at 8.30am)*
Venue : Tan Sri Prof Chin Fung Kee Auditorium, 3rd Floor Wisma IEM, PJ
Speaker: Ir. Mohd Aizam Talib

SYNOPSIS

Power transformers are key components in the electrical power generation, transmission and distribution network. Transformer failure can have a significant economic impact due to long lead times in procurement, manufacturing, and installation in addition to high equipment cost. Determining the existing condition of power transformers is an essential step in analyzing the risk of failure.

In order to have an effective asset management, information on the transformers' health is vital for scheduling maintenance, and repair or even replacements as the incipient faults can be detected and predicted early. With this early warning, asset maintenance can be planned well ahead and unscheduled outages and breakdown of the transformers can be avoided.

The change to condition based maintenance has resulted in the reduction, or even elimination of routine time based maintenance. Instead of doing maintenance at a regular interval, maintenance is only carried out if the condition of the equipment requires it. Hence, there is an increasing need for better nonintrusive diagnostic and monitoring tools to assess the current and possible future condition of transformers in the network. In order to obtain a good transformers' health assessment, a comprehensive diagnostic tests and assessment must be conducted, which allows incipient faults to be located and determined, and if there is a problem, the transformer can then be repaired or replaced before it fails.

Most power utilities have developed inspection and preventive maintenance scheme and utilised different diagnostic testing and monitoring techniques to detect failures occurred in power transformers as a result of degradation of liquid and solid insulation due to various operational stresses. Thus, it is important that the engineers have a substantial knowledge and technical competency level in diagnostic and condition assessment of power transformer by thorough understanding of transformer operation best practice including testing, assessment, monitoring, and maintenance with an aim to extend life cycle of the transformers.

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BIODATA OF SPEAKER

Ir. Mohd Aizam Talib has over 19 years of experiences in dealing with transformer diagnostic, condition and life assessment and failure analysis of power transformer. After graduated, he has worked with ABB Transmission and Distribution Sdn Bhd as Design Engineer and in 1998, he has joined TNB Research Sdn Bhd as Research Engineer. He has held several positions with TNB Research as Senior Researcher, Testing Engineer, Assistant Manager and Manager for High Voltage Testing Laboratory. He is currently holding a position as Technical Expert (Transformer) with TNB Research Sdn Bhd. He was previously a member of Malaysia National Working Group TC 42 for High Voltage Testing with SIRIM and currently active member with Malaysian National Committee of CIGRE, WG A2 Power Transformer. He has published and presented technical papers related to transformer diagnostic and condition assessment at national and international journal and conferences.

Ir. Mohd Azwira Mohd Azmi
Chairman
Oil, Gas & Mining Technical Division, IEM

Ir. Yau Chau Fong
Chairman
Electrical Engineering Technical Division, IEM

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- Preferential admission to talk shall be accorded to IEM members (pre-registration and online registration are NOT required). Telephone and/or fax reservation will NOT be entertained.
- **Non members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.
- ***IEM members who fail to produce their membership cards will be charged a fee of RM25.00. GST is inclusive.***

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

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