

Webinar

Talk on Feasibility Study for Conversion of Gas Turbine to Motor for a Gas Processing Plant (Electrification Initiative)

CPD Hours : 2 CPD Ref No : IEM23/HQ/202/T (w)

Organised by: Oil, Gas and Mining Technical Division

SYNOPSIS

With many oil and gas Plants driving sustainability efforts towards zero carbon emission, thermal waste such as open cycle gas turbine units have become one of the many areas for carbon footprint reduction. Open cycle gas turbine compressor stations typically lose about 68% to 71% of its exhaust thermal energy to environment.

The gas turbines could be equipped with a Heat Recovery Steam Generator to increase its efficiency. In the case where there are no steam users, another option is to go with Electrification, which is replacing the gas turbine with electrical drives. Among the benefits that can be realized are high compressor driver efficiency, improved heat rate of the Plant or grid co-generators, major reduction of carbon emission and utility gas savings.

The talk will be focusing on the feasibility study of such change from gas turbine driving a compressor to an electrical driver, encompassing the technology solution, design considerations, technical selection criteria and constraints, and economic modelling.

SPEAKERS

Ir. Husswan Hadi B Wan Hussein

Ir. Husswan is currently the Principal Electrical Engineer (Distribution) based in PETRONAS Technical Services Sdn Bhd since 2021. He leads as one of the many Engineering Managers under PTSSB for front end studies and engineering for PETRONAS Operating Units in the East Coast region. He holds a bachelor's degree in Electrical Engineering from Purdue University, West Lafayette, USA (2003). Prior to joining PTSSB, he worked in PETRONAS Gas Berhad since 2004 under technical services, maintenance and project departments covering electrical installation, COGEN, switchgears, and distribution equipment up to 132kV.



Mr. M Aminullah M Khalid

Mr. Aminullah is currently a Project Engineer based in PETRONAS Technical Services Sdn Bhd (PTSSB) since 2021. He oversees a few plant change projects under PTSSB in the East Coast region. He holds a Bachelor's degree in Electrical & Electronics Engineering from Universiti Teknologi PETRONAS, UTP (2005) and a Masters Degree in Project Management from Universiti Malaya (UM). He is also a Certified Maintenance & Reliability Professional (CMRP). Prior to joining PTSSB, he worked in PETRONAS Gas Berhad (PGB) from 2006 to 2015 under maintenance and project departments, and then worked with Bureau Veritas (M) Sdn Bhd as Asset Integrity Engineer from 2015 to 2018. Prior to joining PTSSB, he worked with PETRONAS Carigali Iraq Holding BV (PCIHBV) from 2018 to 2021.



Saturday | 10 June 2023 | 9AM – 11AM

Registration Fee:

Student Member: Free | IEM Member: RM15 | Non-Member: RM70

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