

TECHNICAL TALK ON GEOTECHNICAL CHALLENGES ON PUAH DAM, HULU TERENGGANU HYDROELECTRIC PROJECT

(Organised by the Geotechnical Engineering Technical Division, IEM)

BEM Approved CPD/PDP Hours: 2.0 Ref No: IEM17/HQ/429/T

Day/Date: Tuesday, 27th February 2018 Rescheduled to 10th May 2018

Time : 5:30 pm – 7:30 pm

Venue: Malakoff Auditorium, Ground Floor, Wisma IEM, PJ

Presenter: Mr. Howard F. Fries

Abstract:

The TNB Hulu Terengganu Hydroelectric project involved the construction of an 80 m high zoned earth dam to form the Puah Reservoir. A number of issues developed during construction which required deviation from the original design.

Construction of Puah Dam commenced in early 2012 and was completed in October 2014 – a month ahead of schedule. This permitted the capture of the 2014 monsoon so as to permit trial running of the power generation units.

This presentation will present the salient features of Puah Dam in the perspective of:

- Site Setting
- Original Design
- Design Modifications
- Construction, and
- Lessons Learned

Profile of Speaker:



Mr. Howard F. Fries, graduated with his Bachelor's degree in 1974 and Master's degree in 1975 from Cornell University, New York, USA. After graduation, Howard immigrated to Canada and soon began working for various divisions within what is now SNC-Lavalin Inc. He has been with them continuously since 1977 except for a short duration with a New Jersey consultant. He has worked throughout Canada including the arctic on a variety of projects including transportation, heavy civil, slope stability, mine tailings dams among others. This also included working at the world-class tar sand mining operation in Alberta (Syncrude).

His international experience started in 1977 with a short assignment on a tailings dam in Guyana where he also played in the local basketball league. He has carried out short term assignments in Pakistan and Indonesia on port and thermal power plant projects up through 1995 at which time he began a full-time expatriate career in China, Laos, India, and Indonesia on highway and hydroelectric projects. In 2012, he was assigned to TNB's Hulu Terengganu Hydroelectric Project near Tasik Kenyir as a resident engineer overseeing dams and roadways.

Mr. Fries is a companion member of the Institute of Engineers Malaysia and associate member of the Malaysian Geotechnical Society. He is also life members in the Indian Geotechnical Society and Indian Roads Congress along with being a member in the American Society of Civil Engineers since 1975. He is a licensed Professional Engineer in Ontario (Canada) and Maine (United States).

Ir. Lee Peir Tien

Chairman, Geotechnical Engineering Technical Division, IEM

ANNOUNCEMENTS TO NOTE

ADMINISTRATIVE FEE (Effective 1st October 2017)

Members

Administrative Fee:

- Online : RM15
- Walk In : RM20

Non-Members

- Registration Fee : RM50
- Administrative Fee : RM20

- **Non-IEM members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM20**. GST is inclusive.
- Limited seats are available on a "first come first served" basis (maximum 100 participants). **To secure your seat, kindly register online at www.myiem.org.my.**
- Kindly be informed that an administrative fee of **RM20** is payable for talks organized by IEM. GST is inclusive.
- IEM Student Members are however exempted.

PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

CPD/PDP HOURS CONFIRMATION

Name:

Membership No/Grade:

Signature: