

# IES & ACES Training Course on eNPQS

Dates (M&E Session) : 23<sup>th</sup>, 24<sup>th</sup> 25<sup>th</sup> & 26<sup>th</sup> November 2004  
: 23<sup>th</sup> November 2004 (Mechanical) (Theory Session at IES Building)  
: 24<sup>th</sup> November 2004 (Electrical) (Theory Session at IES Building)  
: 25<sup>th</sup> November 2004 (Mechanical)(Practical Session at NTUC Learning Hub)  
: 26<sup>th</sup> November 2004 (Electrical) Practical Session at NTUC Learning Hub)  
Fees : \$120.00 for Mechanical & \$120.00 for Electrical  
Time : 6.30pm to 8.30pm (Theory) & 6.30 pm - 9.30 pm (Practical)  
PDUs : 5 PDUs (Mechanical) & 5 PDUs (Electrical) - To be confirmed

## Note:

- Practical sessions on eNPQS on 25 and 26 Nov is at NTUC Learning Hub, International Plaza 10 Anson Road #06-18 Singapore 079903.
- Light refreshment will be provided during the Practical Session.
- Fees are inclusive of course material, refreshment and GST.
- Complimentary eNPQS CD-ROM with 1-year free subscription will be provided.
- A certificate of attendance will be issued to participants with minimum 75% attendance
- Limited to 25 seats per session.

## INTRODUCTION

Technical specifications, along with drawings, are important contract documents conveying designers' intent and requirements to the executing teams in construction projects. Yet, in Singapore, project specifications often become a source of confusion and dispute rather than clarification.

Many designers find it difficult to write a comprehensive specification due to limited understanding of material and workmanship requirements; and contractors find it difficult to understand and comply with specified requirements, due to varying demands from different designers, incomplete description of the requirements and sometimes even difficulties in understanding the language in the rather lengthy documents.

The National Productivity and Quality Specifications (NPQS) is a Construction 21 initiative, jointly led by BCA, SIA, IES and ACES. In its production it has drawn on the wide experience of various industry players, with a view in producing a useful tool to help practitioners improve in both the production and compliance of project specifications, and thus to result in increased productivity and quality of construction works.

To further enhance productivity and facilitate the use of NPQS by the industry, the electronic National Productivity and Quality Specifications (eNPQS) was developed. The eNPQS is a software that enables easy access to the base NPQS and PSD templates for the preparation of project specifications, while providing an interface to electronic product catalogues. Any additions, changes and omissions to the NPQS can be tracked and compiled by the eNPQS software for effective project tendering and management.

Following the introduction of the NPQS to the industry in May this year, this course is a follow up effort of the BCA, IES and ACES to provide practical hands-on training to would-be users of the NPQS and eNPQS, with the following objectives:

1. To help potential users to develop hands-on competency in adopting the NPQS for project specifications.

2. To equip users with the skills and knowledge to navigate and use the eNPQS for efficient preparation of project specifications.
3. To demonstrate the usefulness of the NPQS and eNPQS in improving productivity and quality of the users' works with the aim of gaining widespread acceptance.
4. To enable users to be familiarized with particular technical requirements stipulated in the NPQS and to obtain feedback to prepare for future enhancement.

This module is targeted at designers/consultants and project developers.

#### **TENTATIVE PROGRAMME - M&E SESSION**

<b>Session</b>	<b>Contents</b>	<b>Led by</b>
<ul style="list-style-type: none"> <li>• 23 Nov 04</li> <li>• 6.30 pm to 8.30 pm</li> <li>• Venue: IES Building <b>(Mechanical Only)</b></li> </ul>	<ul style="list-style-type: none"> <li>◆ NPQS: Background and development</li> <li>◆ Contents of the NPQS:               <ul style="list-style-type: none"> <li>◆ Work package format</li> <li>◆ Standards &amp; Codes Referenced</li> <li>◆ Project Specific Data Sheets</li> </ul> </li> <li>◆ Introduction to mechanical work packages</li> </ul>	Mr Jeff Willis
<ul style="list-style-type: none"> <li>• 24 Nov 04</li> <li>• 6.30 pm to 8.30 pm</li> <li>• Venue: IES Building <b>(Electrical Only)</b></li> </ul>	<ul style="list-style-type: none"> <li>◆ NPQS: Background and development</li> <li>◆ Contents of the NPQS:               <ul style="list-style-type: none"> <li>→ Work package format</li> <li>→ Standards &amp; Codes Referenced</li> <li>→ Project Specific Data Sheets</li> </ul> </li> <li>◆ Introduction to electrical work package:               <ul style="list-style-type: none"> <li>→ HV Switchgear</li> <li>→ Transformers</li> <li>→ LV Switchgear &amp; Distribution Boards</li> </ul> </li> </ul>	Mr Loh Fook Yuen
<ul style="list-style-type: none"> <li>• 25 Nov 04</li> <li>• 6.30 pm to 9.30 pm</li> <li>• Venue : NTUC Learning Hub</li> </ul>	<ul style="list-style-type: none"> <li>◆ eNPQS Practical Session (Mechanical)               <ul style="list-style-type: none"> <li>→ Introduction of the eNPQS concept</li> <li>→ Hands-on specs using software</li> </ul> </li> </ul>	Mr Neo Choon Keong
<ul style="list-style-type: none"> <li>• 26 Nov 04</li> <li>• 6.30 pm to 9.30 pm</li> <li>• Venue : NTUC Learning Hub</li> </ul>	<ul style="list-style-type: none"> <li>◆ eNPQS Practical Session (Electrical)               <ul style="list-style-type: none"> <li>→ Introduction of the eNPQS concept</li> <li>→ Hands-on specs using software</li> </ul> </li> </ul>	Mr Neo Choon Keong

#### **CVS OF SPEAKERS - M&E SESSION**

##### **Mr Jeff Willis**

Mr Jeff Willis is a Mechanical Engineer and has 35 years experience in the design, management and construction management of building projects in the U.K., Europe, the Middle East and the Far East. For the past 25 years he has been employed by Ove Arup & Partners (Arup), an International consulting engineering practice, and during that time has worked in 7 different countries. He became a Director of the company in 1992.

The construction projects with which he has been involved cover a wide range of functions from the MRT in Singapore to highways in Abu Dhabi; from Industrial facilities in UK, Iran, Hong Kong and Indonesia; to infrastructure in UK, UAE and Qatar; from theatres and multi-storey offices in the UK to Universities in Saudi Arabia and Qatar.

Jeff has been involved with the development of the NPQS from the beginning of the project, and was responsible for co-ordinating the production of the Mechanical and Electrical sections of the specification.

##### **Mr Loh Fook Yuen**

Mr Loh Fook Yuen joined the diesel engine industry after graduation and was involved in executing diesel power plant projects for rural electrification as well as marine projects. After a period of 3 years, he joined Prima Flour Mills where he was involved in the maintenance of flour milling equipment and plant facilities.

He is currently a Senior Associate with Alpha Engineering Consultant and has worked on residential, commercial and industrial buildings over the last 10 years.

### **Mr Neo Choon Keong**

Mr Neo Choon Keong is the Manager of the Building Performance Section, Building and Construction Authority. His section, together with SIA, IES and ACES, was involved in managing the development of the NPQS over the past three years. The Building Performance Section also oversees the design, development and distribution of the electronic NPQS software (eNPQS). Beside developing the NPQS, the Section is in charge of developing other construction quality-related initiatives including the development of the Industry Good Practices Guides and accreditation schemes for specialist contractors.

### **INTECH Grant :**

Under EDB's Initiatives In New Technology Scheme (INTECH), **PRIVATE SECTOR** companies can apply for training grant (up to 70% reimbursement of the course fees excluding GST), subject to the approval from EDB. (*See the Terms and Conditions of INTECH grant herein*).

\* The INTECH application form will be forward to companies together with the course confirmation letter. Companies that wish to apply for the grant, please submit your duly completed application form to the IES Secretariat at least 3 working days before the course commencement date.

### **Terms & Conditions of INTECH Grant**

- (a) The company shall ensure that the staffs to be trained are **Singapore citizens or permanent residents**. Non-Singaporeans and non-permanent residents may be supported subject to their becoming permanent residents **within two years** after the completion of the training failing which EDB shall have the right to demand a full refund of all monies for such support.
- (b) The trainee supported under this scheme shall be bonded to work at the company's operations in Singapore based on the company's terms of service from the date of completion of training. The bond period shall be **6 months**.
- (c) Upon resignation of the trainee during the training period or the bond period, the company shall be liable to repay the said sum of subsidy to the EDB within 3 months from the date of resignation of the trainee. The amount to be recovered shall be worked out as follows:

During training period	:	actual amount disbursed by the EDB	
During bond period	:	$\frac{\text{Remaining Period of Unserved Bond}}{\text{Bond Period}} \times \text{Total Training Subsidy Incurred by EDB on the Trainee}$	

- (d) Should the service of the trainee be terminated by the Company before the completion of the training, the full amount of grant disbursed should be returned to the EDB unless reasons for the termination of the trainee can be given by the Company to the satisfaction of the EDB.
- (e) Should the service of the trainee be terminated by the Company during the bond period, no compensation will be required from the Company but the EDB shall have the right to take over remaining Bond Period unserved.

- (f) The Company has understood that its application for the grant is voluntary in nature.
- (g) Other terms and conditions which may from time to time be specified and deemed necessary by the EDB.
- (h) The **maximum number** of trainee supported for this eNPQS course is limited to 90 for the eNPQS Civil & Structural course and 180 for the eNPQS Mechanical & Electrical course. The approval of the application will be on a first-come-first-serve basis.

## Registration Form - IES & ACES Training Course on eNPQS (Nov)

### PLEASE MAIL OR FAX THE COMPLETED FORM TO:

Institution of Engineers, Singapore

70 Bukit Tinggi Road, Singapore 289758

Tel : 64695000

Fax:64671108

Please choose the session that you are attending and tick accordingly:

Mechanical Session  Electrical Session

### Participant Details

Name : (Dr/Mr/Mrs/Ms/Miss) \_\_\_\_\_

Designation : \_\_\_\_\_ Profession: \_\_\_\_\_

NRIC : \_\_\_\_\_ PE Registration No: \_\_\_\_\_

Company : \_\_\_\_\_

Address : \_\_\_\_\_

Postal Code : \_\_\_\_\_

Tel : \_\_\_\_\_ Fax : \_\_\_\_\_

Email : \_\_\_\_\_

Please indicate :  IES/ACES members M'ship No.: \_\_\_\_\_

Non-members  Sponsored by company

Date : \_\_\_\_\_ Signature : \_\_\_\_\_

### Contact Person Details (if different from participant)

Name : \_\_\_\_\_ Designation : \_\_\_\_\_

Tel : \_\_\_\_\_ Fax : \_\_\_\_\_

Email : \_\_\_\_\_

### Payment Details

Bank/Cheque no. : \_\_\_\_\_ Amount : \_\_\_\_\_

Cheque should be made payable to: **"Institution of Engineers, Singapore"**

*Confirmation of events will be given 1 week prior to the commencement of the event. In the event that you are not able to attend the event, please kindly inform us in writing at least three days before the commencement date otherwise the full payment is still applicable even if you did not turn up for the event. Replacement is allowed, however, when a member is replaced by a non-member, the participant has to pay the difference in the fee. For further enquiries, please contact Jenny/Derek at Tel: 64695000, Fax: 64671108 or E-mail: [jenny@iesnet.org.sg](mailto:jenny@iesnet.org.sg) or [derek@iesnet.org.sg](mailto:derek@iesnet.org.sg)*

The Institution reserves the right to make appropriate changes at its discretion

although every effort will be made to inform participants in time.