

# **OIL & GAS PROJECT MANAGEMENT**

## **INTRODUCTION**

Oil and Gas project management is associated with the unique requirements of managing the science, technology, and engineering aspects of projects in the oil and gas industry. Project management principles, methodologies, tools and techniques have been extensively used to manage projects in the construction, high-technology, defense, aerospace, transportation, space, Research and Development industries. As a result, the application of project management, taking into consideration the unique characteristics of the oil & gas projects, is of significant importance to all project management professionals in this industry. This seminar will present the latest in project delivery, planning, scheduling, monitoring and controlling approaches and innovative tools and techniques for effective management of oil and gas projects

## **WHO SHOULD ATTEND?**

This intensive 5-day seminar is suitable for individuals from all industries, government bodies, experienced project personnel, engineers and executives at large owner and contractor organizations whose primary responsibilities are in planning, executing and controlling major projects with insights into the nature and challenges of learning tools and techniques for effectively and efficiently managing Oil and Gas projects as it is based on the best practices found in the Project Management Institute (PMI)'s "A Guide to the Project Management Body of Knowledge" covering the entire project life cycle:

- Portfolio managers/Senior Executives
- Program Managers
- Project managers
- Business Managers
- Project team members
- Functional managers
- Members of Process Improvement Teams
- Members of the Project Management Office (PMO)
- Planners
- Designers
- Contractors
- Owners
- Administrators responsible for managing projects
- Consultants
- Project Analysts

Experienced project managers looking for an advanced knowledge and skills in project planning, scheduling and controlling will benefit from this seminar.

## **SEMINAR OBJECTIVES**

- Understanding the special characteristics of Oil & Gas projects
- Learning the nature of Oil & Gas Project Design
- Implementing success factors for Oil & Gas Projects
- Using a practical, step-by-step process to manage project risks

- Identifying the challenges of intergating modern project management methodologies for Oil & Gas Projects
- Understanding decision tools for project management in the Oil & Gas Industry
- Utilize effective project planning, scheduling and control tools, techniques and best practices to get the jobs done on time, within budget and in accordance with client's requirements

## **TRAINING METHODOLOGY**

The seminar will combine conventional teaching with a high level of participation; including an interactive approach to involving participants in discussion of topics; exercises; and encouraging participants to bring their own experiences forward for discussion and debate. Wherever possible, real examples and short case studies will be included from Oil and Gas industries around the world to make the course as relevant as possible. It includes concepts definition, practical examples, dialogues and discussions, video presentations and case studies that can be used immediately to improve your project management skills of Oil and Gas projects.

## **SEMINAR SUMMARY**

The seminar is created in response to the needs of present-day Owner and Contractor in the Oil and Gas industry. Topics demonstrate how to integrate project objectives, owner's business case and capacities, project plan, project risks, and advanced technology into a systematic approach to successful project delivery of Oil and Gas projects.

## **SEMINAR OUTLINE**

### **DAY 1 – Introduction**

Characteristics and Challenges of Oil & Gas (O&G) Projects  
 The Nature of O&G Project Design  
 What is the Definition of O&G Project Success?  
 The Life Cycle of O&G Projects  
 O & G Project Management and the PMBOK (Project Management Body of Knowledge)  
 O & G Project Management and ISO-21500  
 Project Delivery Systems  
 Project Economics Evaluation  
 Project Finance  
 Reservoir Monitoring & Management Approach  
 Impacts of Government Regulations

### **DAY 2 - Project Initiating & Requirements Definition**

Project Selection Techniques  
 Selecting the Right Project Manager  
 The Business Case  
 The Project Charter  
 Stakeholder Identification & Assessment  
 Basic Data Acquisition  
 Front-End Loading (FEL) Model and Project Phases  
 Requirements Definition  
 Contracting Approaches

### **DAY 3 – Project Planning, Scheduling & Cost Estimating**

Project Scope Development  
The Work Breakdown Structure (WBS)  
The Project Schedule  
The Critical Path Method (CPM) in Scheduling  
Types of Cost Estimating  
The Project Budget  
Lead/Lag Scheduling  
Resource Allocation  
Time-Cost Trade-Offs  
Linear Scheduling Method  
Proactive Risk Management Planning Approach

### **DAY 4 & 5 – Project Execution & Control and Closure**

Directing & Managing Project Execution  
Monitoring Work Performance Information  
Managing the Project Team  
Managing Stakeholder Expectations  
Managing Communications  
Management Styles and Conflict Handling  
Leadership vs. Management in Project Execution  
The Objectives of Project Control  
Project Control Approach  
Project Updating Methods  
Tracking Cost/Schedule Progress Using Earned Value Management (EVM)  
The Earned Schedule Technique: An Advanced EVM Approach  
Schedule Compression  
Controlling Risks  
Project Closure  
Challenges in Project Closure  
Advanced Issues in Oil & Gas Project Management

### **Group Discussions, Practical Examples, Video Presentations and Case Studies**

#### **Seminar's Instructor: Dr. Nghi M. Nguyen, Ph.D., P.E., PMP.**

President and CEO of NDV Project Management Services, Inc (NDV) since 1995, Dr, Nghi M.Nguyen has had 30 years of progressive, domestic and international consulting and training experience in the field of project/program management on major construction, aerospace, defence and high-technology projects with leading Canadian and U.S. corporation such as the SNC-Lavalin Group, Lockheed Martin, CAE and the Canadian Space Agency. Prior to founding NDV in 1995, he served as Program Control Manager for the multi-billion dollar Canadian Patrol Frigate (CPF) program, the largest and most complex shipbuilding program in Canadian history for Lockheed Martin Canada (formerly Unisys Systems Canada).

As an internationally recognized project management consultant and trainer, Dr. Nguyen has assisted clients with project management approaches to effectively and efficiently complete projects and attain their objectives. He is a specialist in project management training, consulting, definition, development, identification of project objectives, constraints

and methodologies. Dr. Nguyen also provided assistance in business development, contract negotiation and strategic alliances for North American and Asian clients doing business in Vietnam. He has been working as a project management consultant for the Canadian Space Agency (CSA) on projects associated with the International Space Station (ISS) program, the 16-nation effort to build the permanently orbiting laboratory in space, the largest and most sophisticated international engineering project ever undertaken in the history of the world as well as for SNC-Lavalin International on China's Three Gorges hydro-electric development project, the largest on-going construction project in the world, and was involved in a number of projects in the Information Technology (IT) and Oil and Gas sectors, among them was the construction of the \$ 5 billion Hibernia Oil Production Platform in St John, Newfoundland, Canada. Dr. Nguyen is currently delivering project management seminars for the American Society of Civil Engineers (ASCE), International Institute for Learning, Inc (IIL) in the USA, EuroMatech and Britania of the U.K., various organizations in Asia and Vietnam as well as those associated with the Engineering Institute of Canada (EIC). He recently developed and delivered a project management curriculum for CAE, the world leader in flight simulation and pilot training, for its project managers in locations worldwide (Canada, the U.S., Australia, Germany, U.K.).

An internationally recognized speaker, author and presenter, Dr. Nguyen has written and presented numerous technical papers on project/program management related topics in international conventions and congresses in Canada, the U.S., Europe, Asia and the Caribbean, sponsored by professional associations such as the Project Management Institute (PMI), the American Consulting Engineering Council (ACEC), The Association for the Advancement of Cost Engineering (AACE) International, American/Canadian Society of Civil Engineers (ASCE/CSCE), the Pan-Pacific Business Association, the American Institute of Aeronautics and Astronautics (AIAA), the Caribbean Council of Engineering Association (CCEA) and the Paris-based association Francais des Ingenieurs et Techniciens d'Estimation et de Planification de Projects (AFITEP).

Educated at McGill and Concordia Universities in Montreal, Quebec, Canada, Dr. Nguyen holds B.S., M.S. and Ph.D. degrees in Civil Engineering and Construction & Project Management and is a Certified Project Management Professional (PMP) and is also a part-time professor at the Faculty of Engineering and Computer Science at Concordia University. He has also lectured under the United Nations Development Programme (UNDP), the Maastricht MBA programme (a joint programme between the Maastricht School of Management of the Netherlands and the School of Industrial Management of Ho Chi Minh City University of Technology, Vietnam) and is a registered civil engineer and project manager in both Canada and the USA. Dr. Nguyen was certified as a PMP (Project Management Professional) by the Project Management Institute (PMI) in 1995. He is currently serving as a member of the Canadian Advisory Council (CAC), set up by The Standards Council of Canada (SCC) to participate in the development of the International Organization for Standardization (ISO)'s project management standard released in September 2012 as ISO 21500 for project management as well as provide recommendations as Draft Reviewer and Contributor to the PMBOK Guide – Fifth Edition of the Project Management Institute (PMI) which has been released in January 2013.