### **CHAPTER II**

## EPC COMPANIES FUNCTIONING IN UAE

## 2.1 Oil Industry Background

Dead and buried organic marine remains below underground rocks in oceans, over a period of million years gets converted into oil due to extreme heat and pressure. It is mainly because oxygen level is very low resulting in the chances of decomposing being negligible. Its location, methodology for drilling and bringing it above the ground level in its crude form is done through application of various technology and tools. In spite of the well known fact about Oil being a non renewable energy, it is widely accepted world over for usage in various fields as main source of energy, especially in the transport industry.

The resulting hydrocarbons present in sedimentary rocks, in due course of time, force their way to surface due to their buoyancy being more than water. Rifting of land masses due to collusions between the two of them coupled with other tectonic forces help oil and gas in escaping to earth's surface. This has lead to large number of oil reserves found in the deserts resulting in ON-SHORE drilling besides OFF-SHORE drilling.

The following paragraphs amply describes the scenario with regard to presence of Oil and Gas companies in the UAE, its engaging EPC companies to execute turnkey projects and problems faced by employees of such EPC companies.

In the list of top 10 oil producing countries, Saudi Arabia leads the list followed by U.S.A and Russia in that order. The United Arab Emirates occupies 8th position.

# 2.2 UAE'S Oil Companies

UAE's economy has improved manifold since the 1971 unification of 7 smaller kingdoms into United Arab Emirates. The Oil exports, over the decades, has made the UAE, once a desert land, into one of the most sought after place for world markets. UAE's Oil and Gas Industry is governed by Supreme Petroleum Council (SPC) with Abu Dhabi National Oil Company (ADNOC) as apex company and its 17 major subsidiaries engaged in oil exploration, refining and marketing. They are enumerated group wise as under:

# 2.2.1 Companies engaged in Oil Exploration and Production:

- Abu Dhabi Company for Onshore Petroleum Operations Ltd. (ADCO)
- ➤ Abu Dhabi Marine Operating Company (ADMAOPCO)
- Zakum Development Company (ZADCO)
- ➤ National Drilling Company (NDC)
- ➤ Al Dhafra Petroleum Operations Co. Ltd.
- ➤ Al Yasat Petroleum Operations Co. Ltd.
- Abu Dhabi Gas Development Co. Ltd. (Al Hosn Gas)

## 2.2.2 Companies engaged in Oil Refining and Processing:

- Abu Dhabi Oil Refining Company (Takreer)
- ➤ Abu Dhabi Polymers Company (Borough)
- ➤ Ruwais Fertilizer Industries (Fertil)
- ➤ Abu Dhabi Gas Industries Ltd. (GASCO)
- ➤ Abu Dhabi Gas Liquefaction Company Ltd. (ADGAS)
- ➤ ADNOC Inde Industrial Gases Company (Elixier)

# 2.2.3 Companies engaged in Marketing and Distribution:

- Abu Dhabi National Oil Company for Distribution (ADNOC Distribution)
- ➤ Abu Dhabi Petroleum Ports Operating Company (IRSHAD)
- Petroleum Services Company (ESNAAD)
- ➤ Abu Dhabi National Tanker Company (ADNATCO) and National Gas Shipping Company (NGSCO)

#### 2.3 Statistics on UAE's Crude Oil Production

Crude Oil Production in the United Arab Emirates averaged 2087.41 BBL/D/1K from 1973 until 2015, reaching an all time high of 2820 BBL/D/1K in March 2012. Its lowest production of 990 BBL/D/1K was recorded in August 1984. According to Trading Economics data chart, Crude Oil Production in the United Arab Emirates remained unchanged at 2820 BBL/D/1K since August of 2015.

# 2.4 Engaging of EPC Companies / EPC Contract

All the Oil and Gas companies engage the services of EPC (Engineering, Procurement and Construction) companies to design, procure, erect and commission a Oil Drilling Plant. Both companies enter into a Lump Sum Turnkey (LSTK) contract whereby only the financial aspect of the Project is undertaken by the Oil and Gas companies whereas it is the responsibility of the other (EPC) to design, to procure (necessary materials, equipments etc), construct and commission the plant within the contract value - both financial and time allotted. This contract is widely known as EPC contract and the companies which are engaged in executing such contacts are known as EPC companies. Executing projects of Water Desalinization Plant, Gas Compressor Plant, Oil receiving Installations are a few examples of EPC contracts.

# 2.5 EPC Companies functioning in UAE on regular basis

Even though there are many companies engaged in EPC contracts in oil industry of UAE, there are 25 EPC companies executing EPC contracts and are having their presence in UAE on a regular basis. These companies are listed below:

Sl.No	Name of the Company
1	Descon Engineering
2	Granite Construction Company
3	Target Engineering Construction Company L.L.C (TARGET)
4	BECHTEL International Co. (BECHTEL)
5	Consolidated Contractors International Company (CCC)
6	Dodsal PTE Ltd Dubai (Dodsal)
7	Dutco Mc Connell Dowell (ME) LLC
8	Petrofac
9	Saipem
10	Hyundai Engineering & Construction
11	Samsung Engineering
12	Technip (France)
13	Worley Parsons
14	CB & I
15	SK Engineering & Construction
16	Technicas Reunidas
17	Larsen & Tubro (L&T)
18	GS Engineering
19	TECTON Engineering & Construction L.L.C

20	Galfar Engineering
21	CH2M Hill
22	Leighton
23	Rub Stone ME L.L.C
24	Al Asab General Transport and Contracting Est.
25	Petronash Oil field services L.L.C

Table 2.1: List of EPC Companies functioning in UAE on regular basis

## 2.6 EPC Companies engaging Expatriates and TCNs

The EPC companies mostly engage Expatriates and TCNs for executing their EPC contracts. According to 2007 labor report the UAE had 3.11 million foreign workers from 202 countries, working in approximately 260,000 establishments. Expats and TCNs make up for more than 90 per cent of the private sector labor force.

## 2.7 Constraints faced by EPC Companies

Since EPC companies have to accomplish their task within the allotted budget and time frame, their managements have to be on the high alert to see that the progress takes place with clockwork precision. Delays in the execution of the project would not only invite wrath of their client but also give room for the client invoking the penalty class in the contract. It may also affect the retention level of employees, thus leading to increasing employee turnover.

The Oil companies invite EPC companies to participate in the bidding process for their proposed facilities. EPC companies participate in Bidding process and submit their proposals for executing the project. Due to current market conditions, there is extreme competition for securing projects. The EPC companies have to become technically acceptable and commercially lowest to win the project. Due to

the above factors, during the period of recession, the EPC companies work on thin margin and at times work on cost basis to keep their equipments and employees engaged.

With thin margins or no margin at times, the EPC companies have lost their luxury in frequently changing their work force. They have to keep the work force and employees satisfied and motivate them to deliver their responsibilities within stipulated time and budget.

## 2.8 EPC Companies and Employees Satisfaction

It is an established fact that a major work force of these EPC companies are Expatriates and TCNs (Third Country Nationals). Since they come from various other parts of the world with their own belief on their religion, customs and practices, they face the problem of getting used to the new surrounding, habits etc., besides facing a feeling animosity towards locals (due to perceived thought that the locals are being given a better treatment), a convivial atmosphere has to be created by the company to enable the entire work force work in tandem - both for their own benefit and company's benefit.

Therefore, one can deduce that it is highly important to keep the employee satisfied and motivated as far as EPC companies are concerned.