

STATE OF THE EPC INDUSTRY

Presented by

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STATE of EPC MARKETS

- **GLOBAL EPC PROJECTS DEMAND HAS TRIPLED OVER THE PAST TWO YEARS.**
- **HOT MAJOR MARKETS;**
- **INTERNATIONAL - UPSTREAM OIL & GAS**
- **DOMESTIC – DOWNSTREAM REFINING PETROCHEMICALS**
- **UPSTREAM & DOWNSTREAM WILL CONTINUE TO GROW OVER NEXT 10 YEARS PROVIDED MANPOWER EXISTS TO EXECUTE PROJECTS**

HUMAN RESOURCES IN CRISIS

- **WORLDWIDE SHORTAGES OF ENGINEERING AND TECHNICAL MANAGEMENT TALENT CURRENTLY AFFECTING EPC , OWNERS AND VENDORS -- WILL CONTINUE**
- **PROJECTS WILL NOT START-- SOME WILL BE ABANDONED DUE TO UNAVAILABLE TALENT**
- **THE INDUSTRY WILL BID UP WAGES / SALARIES RAID COMPETITORS, OUTSOURCE PROJECTS AND RETAIN OLDER EMPLOYEES.**

STATE OF EPC PROJECTS

- **90 % OF EPC PROJECTS ARE OUTSIDE THE USA
NEW PROJECT OPPORTUNITIES
OUTSTRIPPING EPC CAPABILITIES WORLDWIDE**
- **PROJECTS GETTING VERY LARGE AND HAVE
HIGH PROPOSAL COSTS**
- **EPC FIRMS NOW ARE MORE SELECTIVE OF
WHICH PROJECTS TO GO AFTER**
- **OPERATING COMPANIES PICKING UP MORE
PROPOSAL COSTS DUE TO LIMITED NUMBER OF
QUALIFIED EPC FIRMS WHO CAN BID**
- **EPC FIRMS GETTING COST REIMBURSABLE AND
MEANINGFUL RISK SHARING PROJECTS**

STATE OF COMPETITION

- **EPC IS A SELLERS MARKET WORLDWIDE**
- **HALF OF THE EPC FIRMS WORLDWIDE WERE STRUGGLING TO STAY ALIVE UNTIL 2005**
- **INTERNATIONALLY WELL MANAGED FIRMS SUCH AS BECHTEL, MUSTANG, TECHNIP , KBR AND JGC CONTINUE TO DO WELL**
- **DOMESTICALLY JACOBS , CDI , PARAGON AND COMMONWEALTH ARE IMPROVING THEIR POSITION**
- **NEW COMPETITION – KIEWIT AND WGI**
- **ACQUISITIONS WILL CONTINUE**
- **WESTERN EPC FIRMS DOMINATE LARGE PROJECT MANAGEMENT PROGRAMS**

STATE OF COMPETITION -- 2

- **GLOBAIZATION OF THE INTERNATIONAL EPC INDUSTRY NEEDS TO IMPROVE**
- **LUMP SUM WORK DOMINATES IN THE MID EAST**
- **CHINA IN COUNTRY IS DOING WELL– NOT SO IN THE INTERNATIONAL EPC MARKETS**
- **GOOD CONSTRUCTION COMING FROM PHILIPPINES, KOREA, PAKISTAN, TURKEY AND THAILAND**
- **SEVERAL EPC FIRMS PULLING OUT OF SOUTH AMERICA**
- **HOUSTON IS NOW THE LOW COST ENGINEERING CENTER IN THE USA**
- **EPC ADVANTAGE WILL COME FROM TECHNICAL INNOVATION OVER COST CUTTING**
- **MOST US EPC FIRMS WILL BE MORE PROFITABLE PERFORMING COST PLUS CONTRACTING**

STRATEGIC ISSUES

- EPC AND OPERATING COMPANY MANAGEMENT IS NOT AS EXPERIENCED OR AUTONOMOUS AS IN THE 80'S
- OPERATING COMPANIES NEED COMPETENT EPC FIRMS MORE THAN EVER
- OWNER OPERATORS NEED TO ENGAGE EPC MANAGEMENT IN MEANINGFUL BUSINESS DIALOGUE
- EPC FIRMS WILL EXCEL WITH "BEST" TECH / ALLIANCES
- SALESMEN NEED TO BE CAPABLE BUSINESSMEN
- "OPENBOOK" RELATIONSHIPS WILL DOMINATE
- IT AND MANAGEMENT SYSTEMS WILL BE KEY OFFERINGS
- COMPETENT HR MANAGEMENT IS NOW MANDATORY
- MARKET OPPORTUNITIES ABOUND

RECAP

- **THE EPC INDUSTRY IS IN A TURNAROUND POSITION AND WILL DO MUCH BETTER IN THE FUTURE**
- **THE EPC INDUSTRY HAS LESS COMPETITION AND IS BECOMING MORE CLIENT SELECTIVE**
- **OVERALL MARKETS SHOULD BE EXCELLENT OVER THE NEXT TEN YEARS**
- **OWNER/OPERATORS WILL NEED TO PAY FOR MAJOR INTERNATIONAL PROJECT PROPOSALS AND IMPROVE BUSINESS RELATIONSHIPS WITH EPC FIRMS**
- **HUMAN RESOURCES WILL BE THE MAJOR FACTOR RESTRAINING EPC/OPERATING COS. IN THE FUTURE**
- **EPC TOP MANAGEMENT MUST DEVELOP STRATEGIC PLANS FOR SUCCESS AND BEST PROFITABILITY**

**THE STATE OF THE EPC INDUSTRY IS
GOOD AND GETTING BETTER**

**Thank You
Ed Cloutier**