2019 ASC MECHANICAL PROBLEM

Pre-problem Statement and Information Package

Presented by:

Introduction

Welcome Students and Teaching Professionals to the 2019 ASC Student Competition!

The Northern California Mechanical Contractors Association (NCMCA) and Performance Mechanical Inc (PMI). are proud to be the sponsors of the Open Competition Mechanical Problem at the 2019 ASC event in Sparks, NV.

The objective of this problem is to enhance the student's experience in the everyday occurrences of the mechanical industry. This year's problem will expose students to tasks and conditions that a mechanical contractor's project team would experience from day to day. These tasks will include project team construction, planning and the development of an execution plan, scheduling, safety planning, quality control planning, review of specifications, review and understanding of scopes of work, pricing and understanding of mechanical drawings.

This competition is an invaluable tool for your career development. NCMCA/PMI hopes every team benefits from this 'real-life' experience. There are many dynamic elements to every project. Keep an open mind to the challenges that are presented and learn from our experiences as well. At the end of the day, only three teams are awarded, and recognized at the Saturday Awards Ceremony. A best presenter will also be recognized during Saturday's awards ceremony. Regardless of your final overall placement, each competitor is truly a winner when you combine the experience of the competition with the industry exposure you gain throughout the event.

All teams are to provide actual resumes of each student along with a photograph to PMI by January 20, 2019. All resumes shall be in the same format, font, organizational structure, etc.

Problem Premise & Deliverables

Your project team works for Performance Mechanical Inc. You are assigned to one of PMI's most valuable clients.

The client decided to award a large mechanical project to another contractor with whom they had no prior relationship. Two months into the project the client has approached PMI's project team to discuss their current project situation. It's not good! The current contractor is far behind schedule and has had multiple quality and safety issues.

The client would like to understand their options and has come to PMI's project team to help them do this. What the client would like to know is, "would it be a good idea to remove the current contractor and have PMI take over". For the client to make a sound decision they need to know what the price, schedule and execution plan would look like.

The project team needs to develop all of this information and make their best recommendation to the client. Before PMI's project team makes this recommendation they must first present the information and their recommendation to PMI's upper management and fully explain their justification for the recommendation.

Student Prerequisites

Successful teams and their members will need to exhibit the following skills and expertise:

- Team building and problem solving techniques
- Oral and written communication skills
- Project execution
- Scheduling
- Estimating and pricing
- Risk analysis
- Quality management
- Safety planning
- Site logistics

Competition Rules

Without exception, the rules for the competition will be governed by the following guidelines:

- Adhere to the approved and posted ASC 2019 Competition Rules.
- Other competition rules will be reviewed at the Competition Kick-off Conference held on the morning of Thursday, February 7, 2019 at 6:00 AM in PMI's assigned room.
- Participation will be limited to twelve teams for this problem. Participation will be on a first come, first served basis.
- A maximum of one team per school will be admitted for this competition.
- Internet is allowed.
- The following software will be required for problem solving: Navisworks Freedom 2018, Primavera P6 or Microsoft Projects, Microsoft Excel, Microsoft Word and Powerpoint.

Scoring

Scoring will be based upon two things, Teams presentation and the Teams binder. Each will carry a total possible score of 100 points. The scoring of each of those will be broken down as such.

Binder: 100 Pts

- Execution Plan 30 pts
- Schedule: 20 Pts
- Pricing: 15 Pts
- Safety Plan: 10 Pts
- Quality Plan: 10 Pts
- Curve Balls: 15 Points

Presentation: 100 Pts

- Power point: 40 Pts
- Team participation: 15 Pts
- Teams overall oral presentation skills: 15 Pts
- Teams understanding and knowledge of the project: 15 Pts
- Questions and Answer session: 15 Pts

Timeline of Events

Thursday, February 9, 2017

6:00 am – Competition Kick-off Meeting. PMI to introduce Problem Statement and hand out hard copies of project information as well as a memory stick will all information electronically. Teams will also be given a binder with a TOC and tabs.

7:00 am - Group meeting to discuss RFI's.

7:00 pm – Deadline for RFI's.

10:00 pm – Team Binders due. Turn into NCMCA/PMI's Suite. # TBD

Friday, February 10, 2017

7:00 am – All Teams power point files due. Must be the same file use For presentation.

7:15 am – First team presentation (1 hr blocks)

6:15 pm – PMI to present problem summary to teams in PMI's assigned Room.

7:15 pm to 9:00 pm – MCA hosted hospitality event immediately following the debrief session.

Saturday, February 11, 2017

8:00 am to 12:00 pm – Career Fair

Time To Be Determined – Awards Ceremony

Contact Information

Good luck! Any questions can be directed to the PMI representative below.

Contact: Steve Kraak
Email: Skraak@perfmech.com