Prefabrication, Preassembly, Modularization, and Offsite Fabrication (PPMOF)

Marvin Oey American Society of Civil Engineers

Has the potential to:

- Significantly reduce project duration
- Improve productivity
- Reduce labor needs and costs
- Positive impact on supply chain problems

PPMOF Statistics

- Studies show that PPMOF use has increased approximately 90%
- Activities can be found in virtually every discipline of construction
- Major areas include: Equipment, Piping, and Structural Assemblies

Impediments to PPMOF include:

- Increased engineering requirements
- Increased transportation considerations
- Decreased flexibility of scope
- Site constraints
- Coordination
- Communication
- Organizational requirements

Vendor Data Issues

- Communication Problems
 - Standard pre-printed form that documents type, quantity, and schedule of all the needed vendor data
- Coordination Problems
 - Institute vendor data coordination meetings
- Vendor Selection Problems
 - Introduction of a Vendor Pre-Qualification
 Program

Pre-Packaged Issues

- Insufficient Packaged Unit Vendor Engineering Staff
- Complexity of Packaged Units
- Inexperienced Packaged Unit Sub-vendors
- Increased Owner Demand for Customization
- Problematic Packaged Unit Inquiry Specifications
- Lack of Input from O&M Personnel
- Unrealistic Promises by Packaged Unit Sales Personnel

Pre-Packaged Issues Recommendations

- Packaged Unit Vendor Pre-Qualification Program
- Customization/Specification Meeting
- Pre-Award Meeting with Packaged Unit Vendors
- Packaged Units Coordinator