



## Turnaround, Shutdown and Outage Management - TSOM

### COURSE

#### About the Course

Scheduled turnarounds are difficult to manage. Managing a surprise shutdown or outage is like firefighting. Firefighters succeed because they know what strategies work and are highly trained to handle complex, risky situations. Uncertainty and complexity abound when a plant is down. Extra work can appear when equipment is opened and inspected. Integrating project work increases the challenge.

Experienced instructors show you how to control scope uncertainty, tackle the complexity of integrating project work, and get the facility restarted. The course addresses in detail the structure and process that is used to effectively manage all of the potential scope items that Operations, Maintenance, and project staff want to do during the TSO. The overall staged process and management oversight methodology is discussed in detail.

*This course counts toward PMI Project Development Units (PDUs) through continuing education. Completion Certificates may be submitted to PMI as required to document third-party training.*

#### Target Audience

TSO Managers, project managers, supervisors, engineers, schedulers in maintenance, operations, reliability, HSE, procurement and projects should attend. This course also helps business, commercial, finance and other non-technical personnel who want to know more about turnaround, shutdown and outage best practices.

Suitable for Upstream, Pipelines, Refineries, and Petrochemical Plants.

#### You Will Learn

- The major reasons that most TSO's fail and nearly 50% of all TSO's can be considered train wrecks and what you can do to avoid this
- Steps to take to complete the turnaround (TSO) work on time and within budget
- Utilize best practices in TSO planning, execution and closeout
- The critical steps that the TSO team and management must take starting one year prior to the start of the TSO to ensure TSO success
- The key items that need to be complete during each part of the lifecycle of the TSO in the one year prior to the start of the TSO
- A blend of instruction, guided discussion, and hands-on exercises using "real world" examples makes the sessions thought provoking. The exercises will include both single and group activities.

## Course Content

- Metrics that illustrate why certain activities are required for a TSO to meet its key performance indicators
- The correlation between scope growth and TSO failure and how to effectively manage scope
- A detailed discussion of all of the activities that should be done starting one year prior to the start of the TSO
- How to establish clear TSO objectives that align with the needs of all stakeholders
- The TSO objectives will be used to develop Work Scope Qualification Criteria: what is mandatory and what is optional scope. Early on we'll discuss the importance of this criteria to the success of the TSO.
- Discussion will also center around the role of the Work Scope Qualification Team and how it interacts with the TSO Manager, TSO Team, and Steering Team.
- The importance of the TSO Steering Team, in guiding the entire TSO Team, as well as their role in supporting rigorous scope control
- The key role that the TSO Premises Document (similar to a Basis of Design) in planning a successful TSO
- How to use the three major categories of TSO scope to support a successful TSO
- How to develop a TSO management plan (similar to a Project Execution Plan) to align the TSO Team and the Steering Team and use it to plan and deliver a successful TSO
- How to develop a Work Order Package and how in many ways it is very similar to the highly successful Advance Work Packaging methodology that is used to drive down labor costs and improved field productivity
- How to effectively manage planning and execution of both capital project scope and TSO maintenance scope
- How to develop an effective contract breakdown structure for all of the contractors that will work on the TSO
- The use of Earned Value or the Value of Work Done to track TSO work completion, field productivity, and labor costs
- Items to expect from a subcontractor working on the TSO to effectively manage labor and costs for reimbursable work
- Key components of an overall TSO logistics plan including material storage, traffic management, loading/unloading, etc.
- Develop effective plans for procurement, HSE, and quality management
- How to handle emerging work scope
- Tools that a TSO Manager uses during the shutdown to manage activities including the Daily Work List, Execution Progress Meeting, Shift Work Logs, VOWD curves, etc. In essence the course discusses, a day in the life of a TSO Manager.

## Product Details

Categories: [Upstream](#)

Disciplines: [Operations & Maintenance](#) [Project Management](#)

Levels: [Intermediate](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [PetroSkills Specialist](#) [Ken Lunsford](#)

**In-Classroom Format**

|            |            |   |  |        |  |                           |            |
|------------|------------|---|--|--------|--|---------------------------|------------|
| 26 Aug '24 | 28 Aug '24 | - |  | Course |  | In-Classroom (in Houston) | \$3,595.00 |
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