

AABC Commissioning Group

AIA Provider Number 50111116



# The Role of the Commissioning Authority in Public Private Partnership (P3) Projects

Course Number: CXENERGY1608

Presented By  
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April 12, 2016

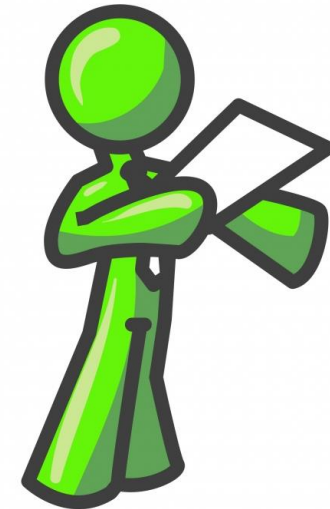


# Agenda

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1. What is P3?
2. History of P3
3. How Does It Work?
4. Comparison P3 vs. Standard Government D-B-B
5. Advantages of P3
6. Disadvantages of P3
7. Case Study: Long Beach Courthouse
8. Summary

Q+A



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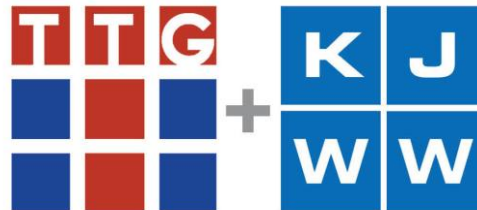
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# Course Description

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The **Public-Private Partnership (P3) model** offers a promising method of financing public infrastructure projects by using private capital.

These projects create unique challenges for the commissioning team. Using its role in the award-winning Long Beach Court House project as a case study, TTG Commissioning provides insights into the roles of the CxA and commissioning oversight personnel in a P3 project.



# Learning Objectives

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**At the end of the this course, participants will be able to:**

- 1. Gain an Understanding of What Makes up P3 Projects.**
- 2. Understand What Role Commissioning Plays in a P3 Project.**
- 3. Understand What Commissioning Entails on a P3 Project.**
- 4. Understand Roles and Responsibilities of Commissioning Oversight for a P3 Project.**



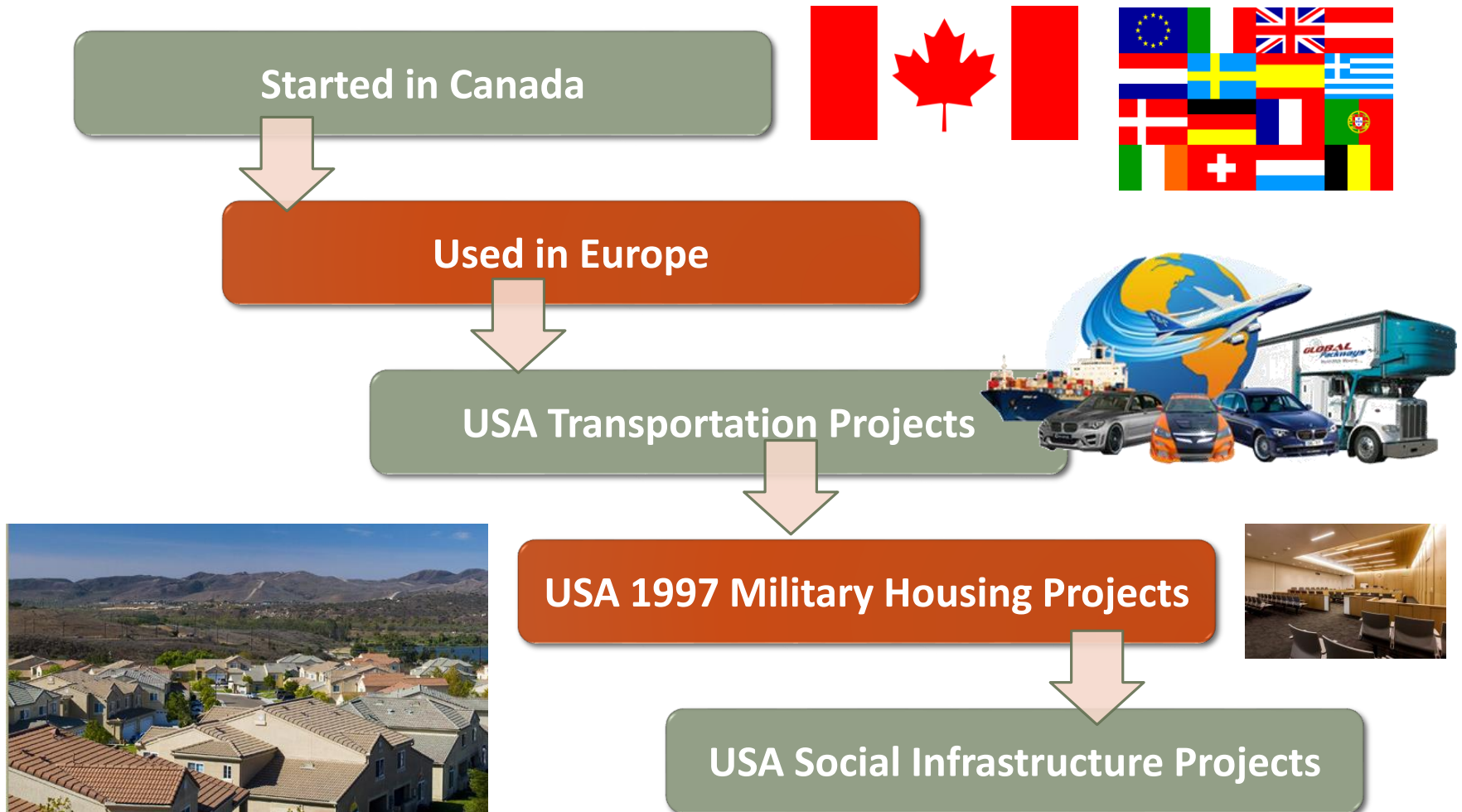
# 1. What is P3? Public Private Partnership

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**Contractual Agreement between  
a Public Sector Body (Government Agency)  
and a Private Sector Body (Business)**

## 2. History of P3





### 3. How Does It Work?

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#### Public Sector

Bring a Need  
(Facility, Infrastructure, etc.)

May include an asset  
(i.e. Land)

Provide a revenue stream

Issue RFP

Select Private sector team

May participate in  
design & construction



#### Private Sector

Design

Build

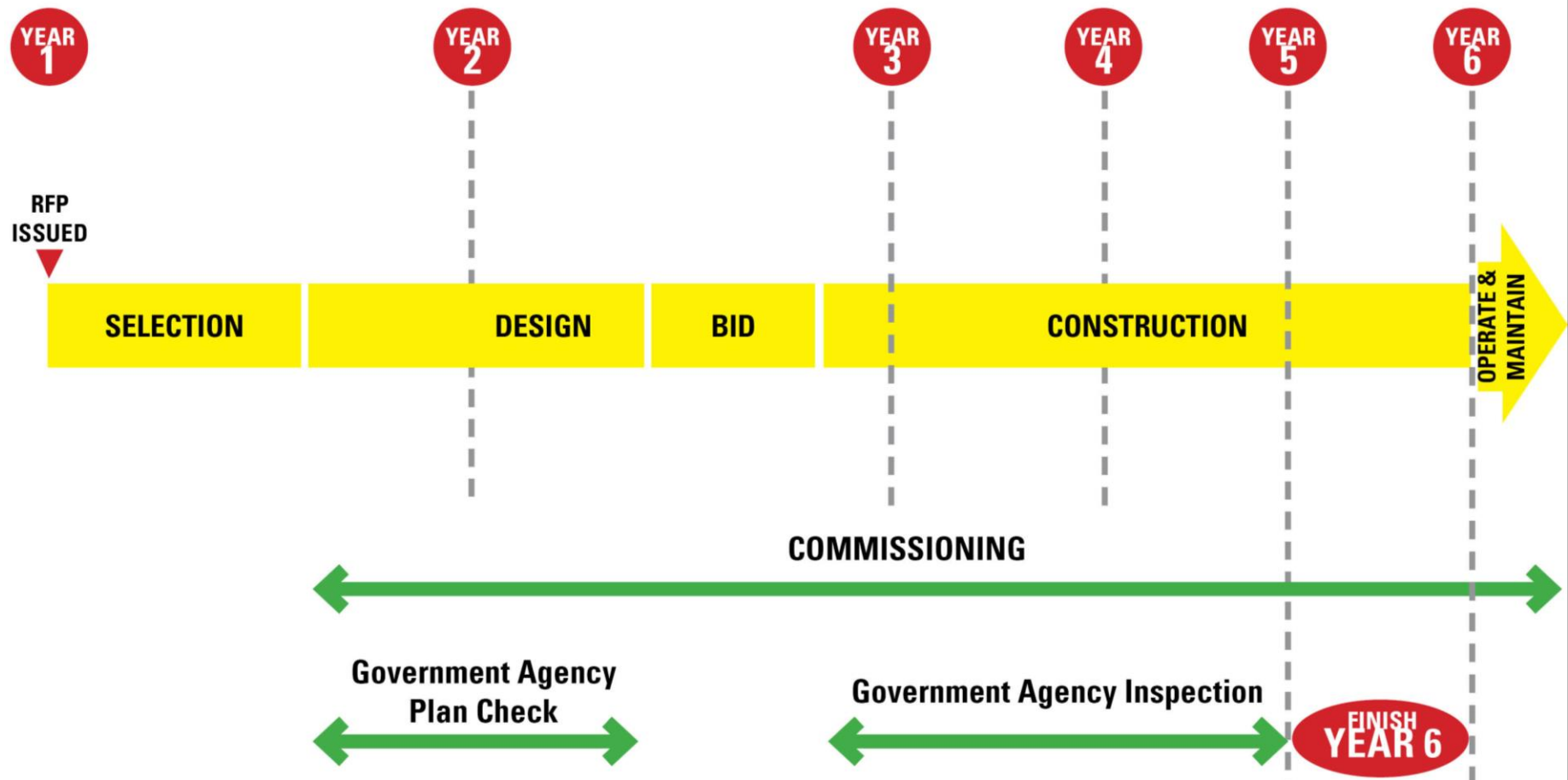
Finance

Operate and maintain  
for an agreed upon term



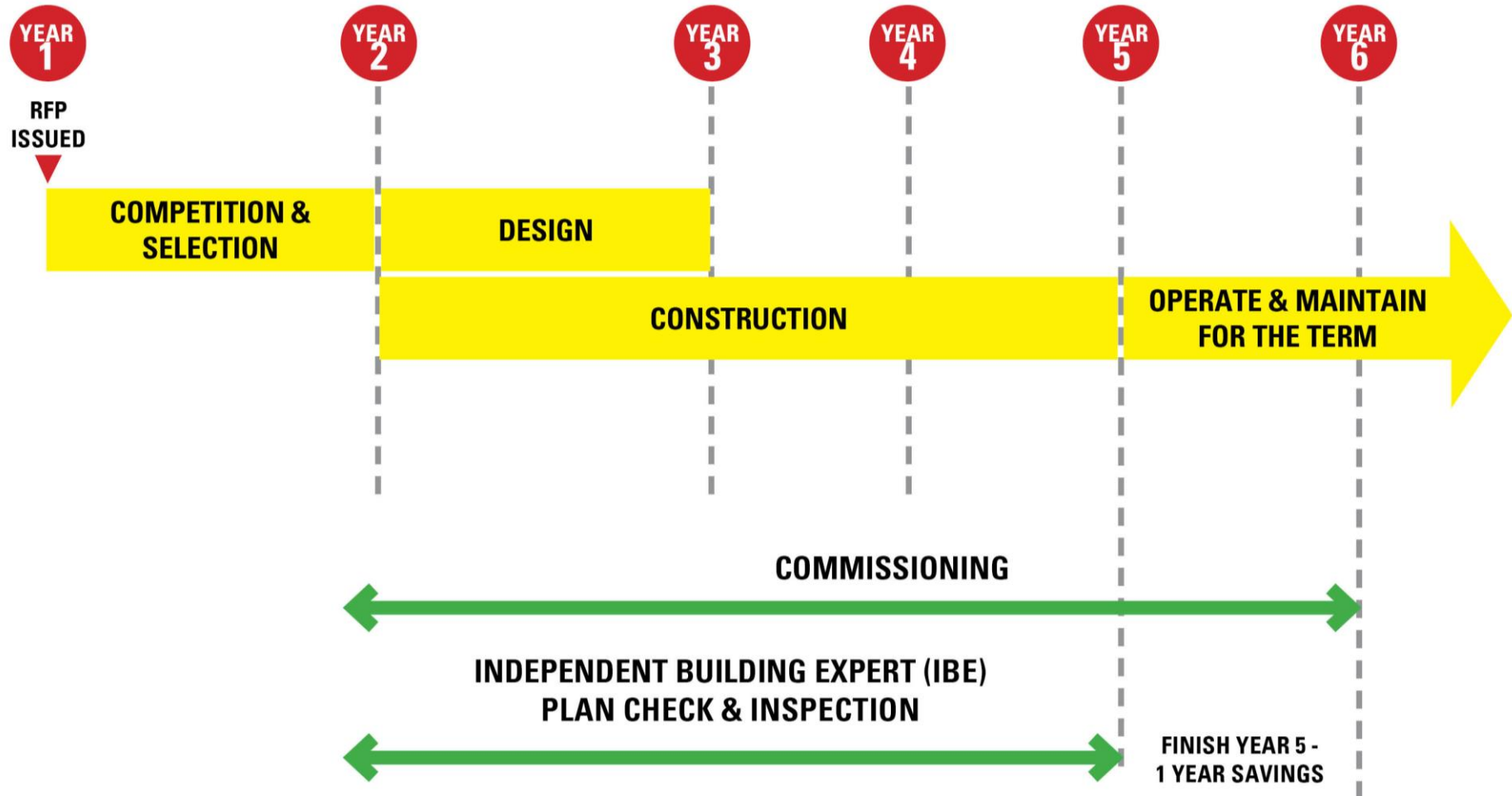
## 4. Comparison P3 vs. Standard Government Process

### Design-Bid-Build



# 4. Comparison P3 vs. Standard Government Process

**P3**



# 5. Advantages to P3

- Allows Public & Private Sectors To Do What They Do Best
- Provides Capital
- Improves Budget Certainty
- Transfer Of Risk From Public To Private
- Greater Control Over Business Decisions
- Shorter Delivery Time Is Possible
- Project Can Be Performance Based
- Better Quality



## 6. Disadvantages to P3

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- Capital More Expensive
- Costly To Compete
- Less Public Sector Employees During Operations & Maintenance
- Public Opinion Naysayers



# 7. Case Study: Long Beach Courthouse

## Highlights

- First social infrastructure project in United States
- \$480 million
- Design & built in 3 years
- Completed ahead of schedule & under estimated cost

## Project Team

- AOC State CFCA – Public Sector
- LBJP – Developer
- Meridian – Finance
- Clark Construction – Contractor
- AECOM – Designer
- TTG – IBE
- Johnson Controls – Operator





# 7. Case Study: Long Beach Courthouse

## Long Beach Courthouse Commissioning List

### Systems Commissioned by CxA:

#### I. Heating, Ventilating and Air Conditioning Systems:

- a. Air Handling Systems
- b. Heating Hot Water System
- c. Chilled Water Systems
- d. Condensing Water Systems
- e. Ventilation Systems
- f. Building Automation System
- g. Test and Balance Verification  
(Air / Water)



# 7. Case Study: Long Beach Courthouse

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## Long Beach Courthouse Commissioning List

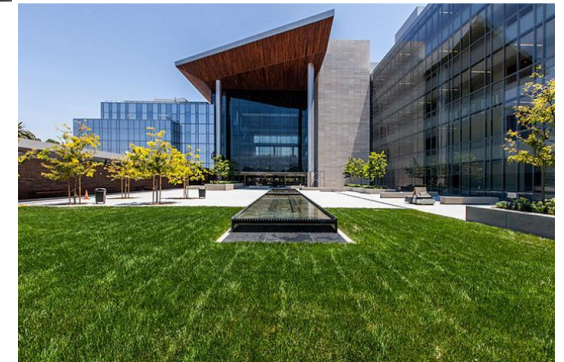
### Systems Commissioned by CxA:

II. Plumbing Systems

III. Electrical Systems

IV. Irrigation System

V. Building Envelope





# 7. Case Study: Long Beach Courthouse

## Long Beach Courthouse Commissioning List

### Systems Commissioned by Others:

- I. Smoke Evacuation & Pressurization Systems
- II. Waste Water Plumbing Systems
- III. Fire and Life Safety System
- IV. Fire Sprinkler System
- V. Electrical System
  - a. Power Distribution Systems, including Switchgear and Panels
  - b. Automatic Transfer Switches
  - c. Uninterruptable Power Supply
  - d. Emergency Generator
  - e. Access Control and Security Systems
  - f. Audio-Visual Systems
  - g. Telecommunication Systems
  - h. GKD Mediamesh
  - i. Intercom Systems
  - j. CCTV
  - k. Public Emergency Communications



# 7. Case Study: Long Beach Courthouse

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## Role of Commissioning Oversight

### Definition:

*“The IBE should be responsible only for oversight of the Commissioning program, which will be considered the Enhanced Commissioning program under LEED but shall not be required to provide the services of a commissioning agent. The Design-Builder will engage a commissioning agent to provide those services and the IBE shall provide oversight that ensures the commission plans are well prepared and the appropriate tests and reports are provided by the commissioning agent.”*

# 7. Case Study: Long Beach Courthouse

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## Role of Commissioning Oversight

### Reasoning:

*In standard projects, you do commissioning because when the building is turned over to the owner there is a need for confidence of the building operation performance.*

*The reason for the IBE commissioning oversight is that the Partner Company (LBJP) wanted to confirm that Clark Construction had properly completed with the project before turning the facility over to the Operator (JCI). Also it is the responsibility of the IBE to issue the Occupancy Readiness and ultimately the Certificate of Occupancy.*

**Jeff Fullerton, Director – Edgemoor Infrastructure and Real Estate**

# 7. Case Study: Long Beach Courthouse

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## Role of Commissioning Oversight

### Responsibilities:

- Act as the Partner Company (LBJP) representative
- Work closely with JCI and the LBJP CxA to drive long-term operating success
- Review all commissioning documents
- Attend all Commissioning Meetings
- Confirm completion of installation
- Review Cx Deficiency Log
- Witness specific commissioning testing activities
- Conduct commissioning for specialty systems
- Advise the IBE on commissioning completion prior to Substantial Completion and Occupancy Readiness
- Review copy of final Commissioning Test Report



## 8. Summary

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**Not a Homogenous Process**

*(one model does not fit all)*

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**Not for the Faint at Heart**

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**NPV of P3 is Traditionally Less Expensive**

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**P3 Delivers Better Quality Because  
Private Sector Builds for Itself and Has to  
Operate Facility for Term of Contract**

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**Team Selection Is Critical**

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**Commissioning Oversight is a Valuable Asset to  
Owners/Operator to Confirm Completion of Project**

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