

National Council of Public-Private Partnerships
P3: A Solution For Texas Water Management
Austin, Texas
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**LEGAL AND
COMMERCIAL PERSPECTIVES ON
THE CARLSBAD SEAWATER
DESALINATION P3 PROJECT**

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HAWKINS PERSPECTIVE

**Public/Private Partnership Transaction
Attorneys**

**National Infrastructure Contracts and
Procurement and Contract Practice**

Municipal Representation Exclusively

**Water, Wastewater, Solid Waste, Social
Infrastructure, Transportation and Power**

Water and Wastewater Project Specialists

**Lead Counsel to San Diego County Water
Authority for Carlsbad Project**

PROJECT BASICS

PROJECT PROFILE

Water Treatment Project

Reverse Osmosis Seawater Desalination

Technology Proven Internationally

50 MGD Plant and 11 Miles of Pipelines

Co-located with Encina Power Station

Privately Developed, Publicly Sponsored

Structured as a “Water Purchase Contract”

**California’s First Major Water Public-Private
Partnership**

DRIVERS

**California Water Availability and
Allocation Uncertainties**

New Water Source

**Enhance Regional Water Resource
Security**

**Transfer Development and
Performance Risks**

“New Water” Versus “Old Water”

PARTICIPANTS

San Diego County Water Authority (Buyer)

Poseidon Water (Seller)

Stonepeak (Equity)

Kiewit/Shea JV (Design-Build Contractor)

IDE (Operator)

JPM Chase and Barclays (Investment Bankers)

City of Carlsbad (Host Community)

Cabrillo (Site Lessor)

CPCFA (Bond Issuer)

SITE

**Cabrillo (NRG) Encina Power Station in
Carlsbad**

Poseidon Secured Long Term Site Lease

**Power Plant Uses 600 MGD of Seawater for
Cooling**

**Desalination Plant is Adjacent to Power Plant
Will Use 100 MGD of Raw Seawater**

**“Once Through” Cooling Rules Will Close
Power Plant in 2017**

**Desalination Plant Will Continue to Use Intake
Structure**

ENVIRONMENT AND HEALTH

**Certified Environmental Impact Report
California Coastal Commission Permit
Issued**

**State Lands Commission Approval
Received**

Pilot Testing Completed

Environmental Litigation Concluded

**California Department of Health New
Domestic Water Supply Permit To Be
Obtained Upon Completion**

SUSTAINABILITY (1)

“Energy Minimization and GHG Reduction Plan” – a Permit Condition

“On-Site” Measures:

- **Green Building Design**
- **Solar Power**
- **Energy Recovery for Plant**
- **Injecting Recovered CO₂ Into Desalinated Water**

SUSTAINABILITY (2)

“Project-Related” Measures – Avoided Emissions From:

- **Reducing Energy Needs at Plant**
- **Displacing Pumped, Imported Water**
- **New Coastal Wetland Trapping CO₂**

DEVELOPMENT RISK

**12+ Years in Development by Poseidon
\$60mm+ Invested, Completely At Risk
Largely Recouped, With Return, Upon
Closing**

**Initially, a Local Project For Some Member
Agencies**

**Ultimately, a Full Regional Project
Negotiations Begin July, 2010**

**Commercial and Commercial Close—
December 2012**

WATER PURCHASE AGREEMENT

KEY COMMITMENTS

Poseidon Designs, Builds, Finances, Owns and Operates the Project (DBFOO)

30-year Water Authority “Take or Pay” Water Purchase Agreement Following Completion

Water Authority Nominal Cost End-of-Term Purchase Option

56,000 AF Per Year Maximum Delivery Commitment

48,000 AF Per Year-Minimum Demand Commitment

\$1800-\$2100+ Per Acre Foot

Product Water Quality Guaranteed (Based on Assumed Raw Seawater Conditions)

Electricity Usage Guaranteed

DESIGN, BUILD, FINANCE, OPERATE

Poseidon Designs, Builds, Finances and Operates the Plant

DB Work Subcontracted to Kiewit/Shea

O&M Subcontracted to IDE

36-Month Construction Period

12-Month Grace For Completion

**Extendable for Uncontrollable
Circumstances**

WATER PURCHASE

**Obligation Commences Upon Project
Acceptance**

Water Ordering Procedures

Integrated With CWA's System Needs

Payment Only For Water Delivered

Deductions For Off-Spec Water

No Payment For Unacceptable Water

**3 Year Extension If UC's Prevent Water
Sales**

CONSTRUCTION RISKS TRANSFERRED

Design Liability

Completion Risk (Delay and Efficacy)

Construction Cost Overruns

Disputes Between Designer and Builder

Securing Patents and Licenses

**Most Permitting Risks (Terms and
Conditions)**

Site Conditions

OPERATION RISKS TRANSFERRED

O&M Cost Overruns

Regulatory Compliance

Capital Maintenance

Technological Obsolescence

Excess Electricity Consumption

Labor Relations

RETAINED RISKS (UNCONTROLLABLE CIRCUMSTANCES)

Changes in Law

Uninsurable Force Majeure Events

**General Price Inflation (Water
Purchase Price Is Partially Index-
Linked)**

PROJECT DEBT STRUCTURE

CWA's Water Purchase Agreement Is Pledged To Secure Debt

Water Purchase Payments Contain Capital Component (Debt and Equity Return) and O+M Component

Project Feasibility and Risk Study Conducted

Project Company Invests 18% Equity (With 9-14% Return)

Equity is Cushion Against Contractor Non-performance and CWA Non-payment

Project Debt Rating (BBB-1) Lower than CWA's Recourse Debt

PROJECT FINANCING

“Private Project Financing for Public Infrastructure”

Company’s Project Debt is Tax-Exempt, Low Cost

**Private Activity Bond “Volume Cap” Obtained
Water Purchase Payments Are Secured by
Water Authority’s System Revenue**

No SRF Funding

**\$250/Acre Foot Subsidy from Metropolitan
Water District Possible Later**

SECURITY FOR PERFORMANCE

Project Company Has No Resources Other Than the Plant and the WPA

Subcontracts and Sureties Provide Indirect Security

Water Purchase Payments Don't Start Until Project Completion

**Payment Offset Rights for Non-Performance
Intense Scrutiny and Cure Rights by Equity
and Bondholders to Protect Their
Interests**

Modest Letter of Credit

PROTECTION OF THE PUBLIC INTEREST

**Comprehensive, Unified Asset Development
and Management Under One Contract**

Establishment of Plant Design Requirements

Pipeline Standards

Water Quality Guarantees

Water Delivery Guarantees

Acceptance Criteria

CDPH Domestic Water Supply Permit

DBFO – INTERNATIONAL NORM

Australia, UK, Canada

Partnerships BC, Infrastructure Ontario

Dozens of Projects

**DBFO Consistently Chosen Over the
Traditional Delivery Method**

Disciplined Analysis of Risk Transfer

**Small Difference Internationally in Cost
of Capital (All Taxable)**

DBFO Is Emerging in the U.S.

CARLSBAD SUCCESS FACTORS

**Courageous and Wise Public Sector
Leadership**

**Extraordinarily Determined Private
Entrepreneurs**

Compelling Public Purpose, Willingness to Pay

High Quality Contractors, Proven Technology

Competitive Construction Cost Environment

Historically Low Interest Rates Generally

Tax Exempt Financing Particularly

SUMMARY

**Private Financing Can Drive, and Better Secure,
Project Development and Financing**

**Single Point of Accountability for Risks of
Siting, Development, Technology,
Performance and Cost**

Private Financing Can Be Tax Exempt

No Debt on Public Balance Sheet

**No Municipal Bonds Payable If Project Doesn't
Work Well**

Payment Only For Performance

**“All This, My Friend, Is Offered
Merely For Your Consideration
And Judgment, And Without
Presuming To Anticipate What
You Alone Are Qualified
To Decide For Yourself.”**

Thomas Jefferson

THANK YOU

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