San Vicente Energy Storage Facility
Full-Service Team Proposals
Special Engineering & Operations Committee Meeting

NOVEMBER 16, 2017

Michael Hogan, Chair, San Vicente Energy Storage Task Force
Kelly Rodgers, Energy Program Manager
Lan Wiborg, Deputy Director, City of San Diego
Kevin Davis, Project Director, Black & Veatch
Meeting Objectives

- Review project and completed work
- Provide update on two recent solicitation processes
- Present December 7, 2017 Engineering and Operations Committee actions
- Conduct closed session
San Vicente Energy Storage Facility

- Study potential project
- Partnership with City of San Diego
- Renewable energy integration
- Demand response/on-call power
- Significant existing infrastructure
- Revenue generation
- Up to 500 megawatt capacity
- Up to 8-hours of storage
Economic Study Work

2014
Completed Initial Economic Study

2015-2016
Owners’ Advisor conducted deeper analyses
Updated Water Authority Board

2016
Board directed staff to conduct process to gauge project marketability
Request for Letters of Interest Process

January 2017
Advertised RFLOI

February 2017
Received 19 Letters

March 2017
Met with Interested Parties

April 2017
Board Approved Issuing two RFPs
Two Solicitation Processes

OWNERS’ REPRESENTATIVE

- Solicit a multidisciplinary team to assist with Full-Service Team selection and negotiations

FULL-SERVICE TEAM

- Solicit a multidisciplinary Full-Service Team that can complete all project activities
Owners’ Representative RFP

Selection Panel

- Water Authority staff
- City staff and consultant
- Task Force members

Outcome

- Selected Black & Veatch
- $150,000 contract
Full-Service Team RFP

Selection Panel
- Water Authority staff
- City staff and consultant
- Task Force members
- Black & Veatch

Update
- September 12
  - Received five proposals
Full-Service Team Proposals

- Asset compensation with upside sharing
- Optimization ideas
- Team and project delivery approach
- Rating criteria
Rating Criteria

**Step 1 - Pass/Fail**
- Qualifications & Experience
- Project & Owners’ Requirements
- Risk Mitigation Strategy

**Step 2 – Scoring**
- Best Value/Terms & Conditions/Financing Plan - 55%
- Optimization Plan - 25%
- Offtakers Strategy - 20%

**Outcome**
- Shortlisted teams invited to interviews
Pre-Interview Follow-up Process for Normalization of Proposals

Requested Additional Information
- Financial Model
- PPA Term Length/Benefits
- Capacity Payment Basis and Terms
- Value of Storage
- Other Technologies
Pre-Interview Follow-up
Federal Energy Regulatory Commission

- Municipal Preference provides municipalities priority for developing the project
- Water Authority and City invoked Municipal Preference
- Full-Service Team proposal did not fully address FERC requirements
- Requested teams to address in interviews
Interviews on October 31, 2017

Discuss strategy for:
- Municipal Preference
- Securing an offtaker
- Maximizing project revenue
- Revenue sharing
- Financing
- Discuss potential risk sharing options and increase of Owners’ revenue

Team Presentation (30 Minutes)

Two types of questions:
- Proposer-specific
- Panel follow-up

Panel Questions (90 Minutes)
Full-Service Team Interviews

- Interviewed three of the five proposers:
  - Brookfield US Generation LLC
  - EDF Renewable Energy
  - Tenaska, Inc. – Diamond Generating Corporation Joint Venture
Brookfield

**KEY TEAM MEMBERS**

- SNC Lavalin
- Kiewit
- GE Alstom
- Helix Environmental
- Kleinschmidt Associates

**KEY PROPOSAL POINTS**

- Highly qualified team with experience in engineering, construction and operations.
- Engaged in energy legislative and regulatory processes
- Responsive to RFP and also presented several other business models
- Unclear on how upside revenue is shared with Owners
- Presented broad offtaker strategy
EDF

KEY TEAM MEMBERS

- Parsons
- Debenham Energy

KEY PROPOSAL POINTS

- Experienced team with significant support from EDF European affiliate in France.
- Risk transfer to Owners
- Deviated from RFP - proposed a hybrid that included a battery
- Licensing and permitting schedule rationale unclear
- Offtaker strategy unclear
Tenaska-Diamond

KEY TEAM MEMBERS

- Stantec
- Dentons Law Firm

KEY PROPOSAL POINTS

- Highly qualified team with experience in design and construction
- Engaged in energy legislative and regulatory processes
- Responsive to RFP but also indicated flexibility in business models
- Discussed sharing of upside revenue
- Presented broad offtaker strategy
Interview Results

- Facilitated panel debrief
- Seeking additional information from two remaining teams:
  - Brookfield
  - Tenaska – Diamond Joint Venture
Finalist Full-Service Teams

Brookfield
- Subsidiary, Brookfield Renewable Partners L.P. owns and operates renewable power assets
- Over 10,000 MW of pumped storage experience across three continents

Tenaska - Diamond Joint Venture
- Tenaska developed approximately 10,000 MW of electric generation facilities domestically and internationally
- Tenaska/Diamond - worked together on power projects since 1989 - have five joint projects totaling 4,400 MW of generation in operation or under construction
Key Milestones and Activities

**Dec 2017**
Request Board authorize Finalist Team negotiations

**March 2018**
Request Board approval of Project Delivery Agreement

**April 2018**
California Independent System Operator Interconnection Request due

**May 2018**
Federal Energy Regulatory Commission Preliminary Permit extension due
Resource Allocation

- In the event a Project Delivery Agreement is not executed by March 2018:
  - Black & Veatch could complete CAISO interconnection application
  - Staff could prepare FERC preliminary permit extension request with existing external legal counsel review (Van Ness Feldman LLP)

- Project Delivery Agreement Draft
  - Allen Matkins LLP external legal counsel services
December 7 E&O Committee Meeting

- Approval of:
  - Beginning Project Delivery Agreement negotiations with Finalist Full-Service Team
  - Amending Allen Matkins LLP Contract to complete drafting of the Project Delivery Agreement
    - Was contemplated and is included in the approved project budget