



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

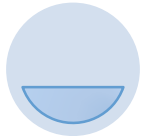
- Review project and completed work
- Provide update on two recent solicitation processes
- Present December 7, 2017 Engineering and Operations Committee actions
- Conduct closed session

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

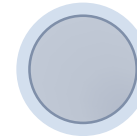
Completed Initial
Economic Study



2015-2016

Owners' Advisor
conducted deeper
analyses

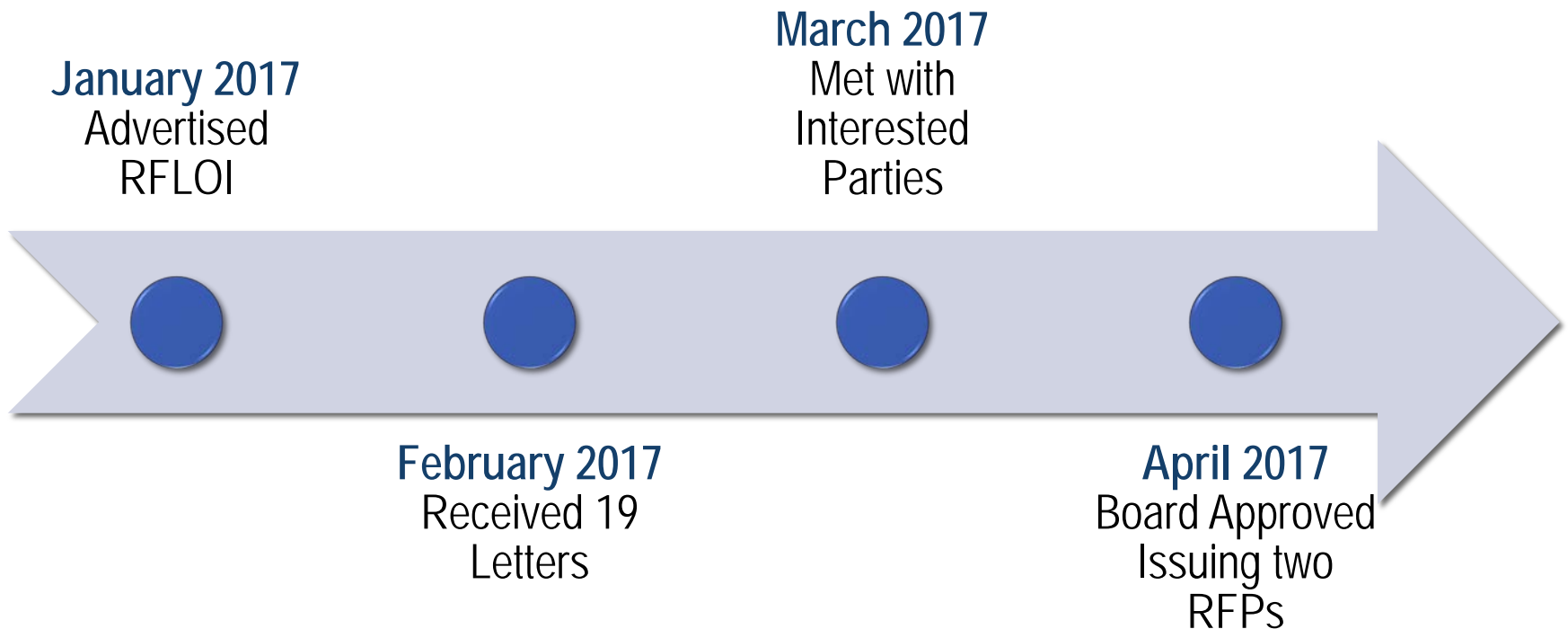
Updated Water
Authority Board



2016

Board directed
staff to conduct
process to gauge
project
marketability

Request for Letters of Interest Process



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

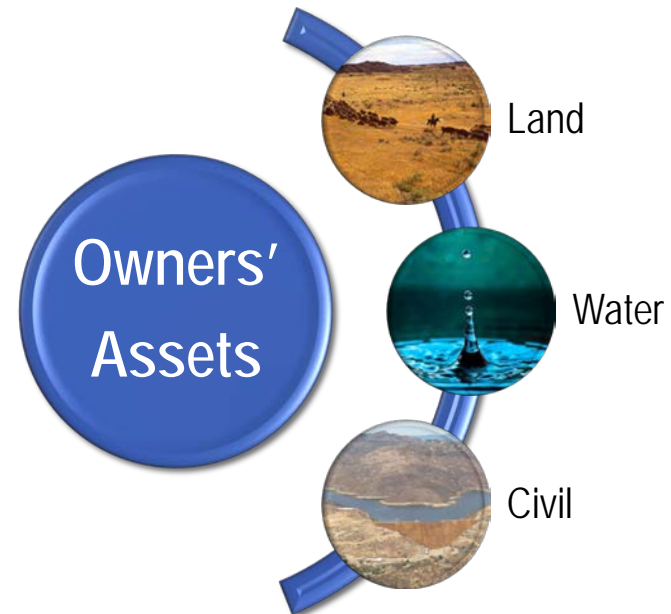
Update

- September 12
 - Received five proposals

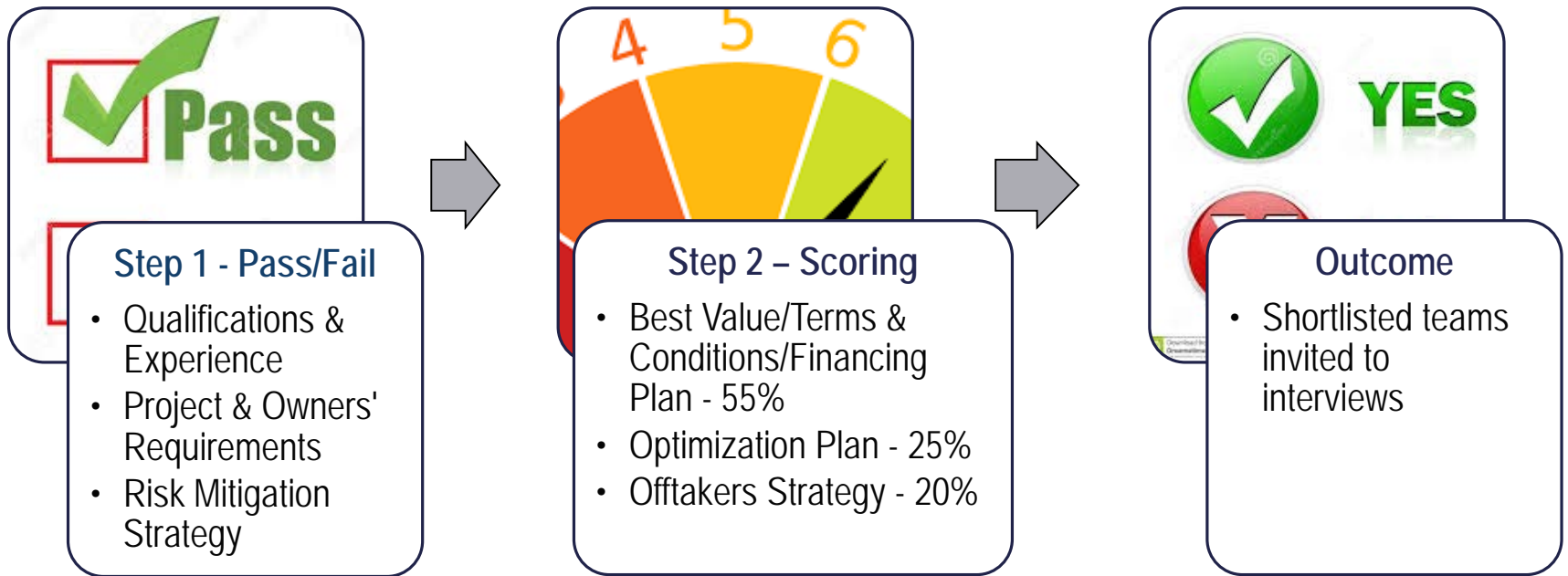


Full-Service Team Proposals

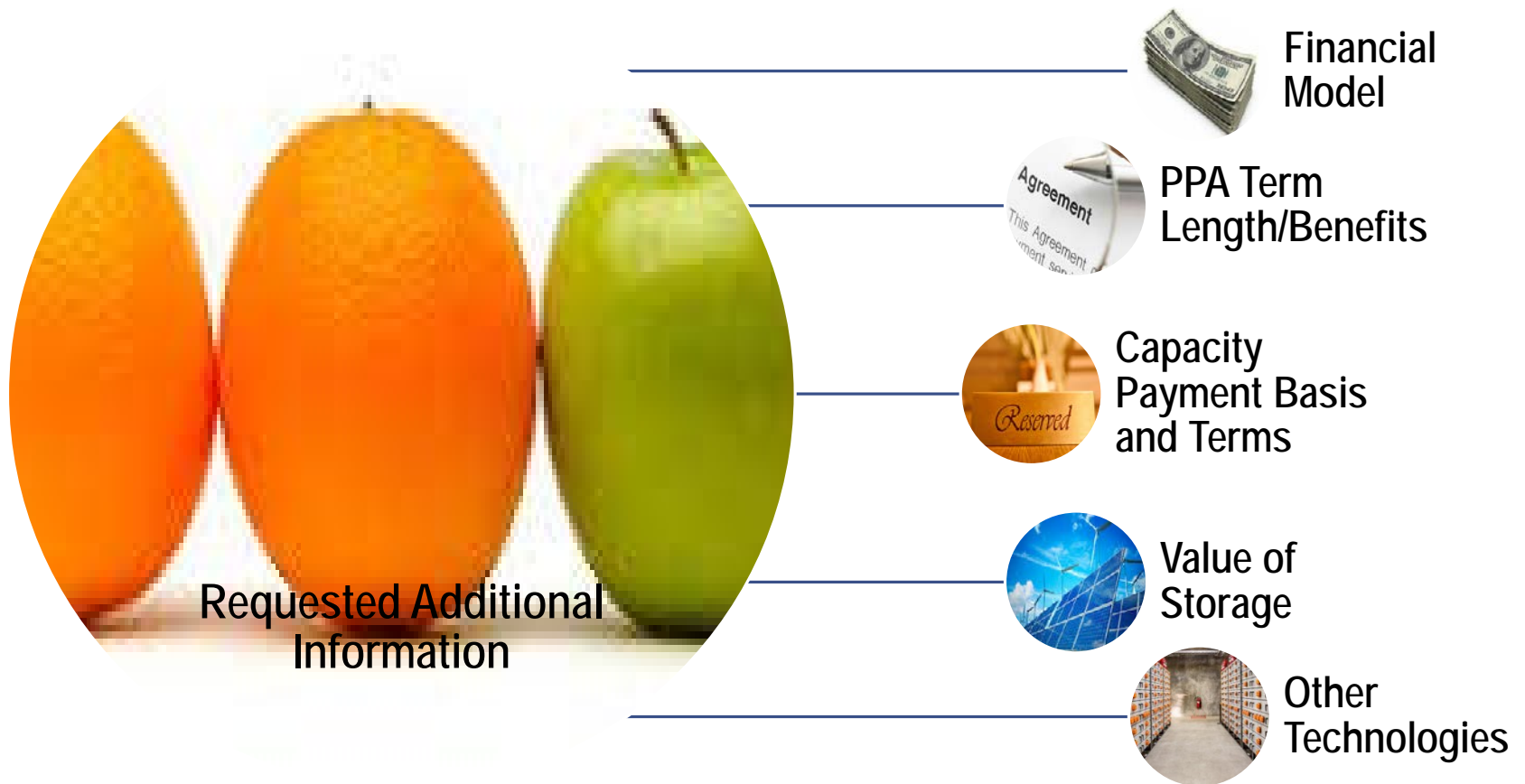
- Asset compensation with upside sharing
- Optimization ideas
- Team and project delivery approach
- Rating criteria



Rating Criteria



Pre-Interview Follow-up Process for Normalization of Proposals



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

