

**Project Name:** Planning Alternative Corridors for Transmission (PACT)

**OCIO Project #:**

**Department:** 3360 Energy Commission

**Revision Date:** 7/1/09

# Concept Statement

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## Description

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### **Brief description of the proposed project:**

PACT is a decision support tool built upon a set of web-based tools (Data Prep, Web Builder and Web Site Template) which enables utility planners and regulators to clearly display the results of environmental analyses of alternative sites proposed for generation facility development such as transmission lines, generation facilities and substations. The PACT tool needs to be moved from the development environment to the custody of the Energy Commission.

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## Need Statement

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### **High Level Functional Requirements:**

The California Energy Commission's Public Interest Energy Research (PIER) Program sponsored the development of the PACT. The PACT tool needs to be moved to the Energy Commission's infrastructure for hosting. In addition, there is a need to replace aged, proprietary software (Cause&Effect) with newer Commercial-Off-The-Shelf (COTS) and Open Source tools.

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### **What is Driving This Need?**

The PACT application was developed by a company with the knowledge and expertise to write the software code and perform testing. The application needs to be moved into the Production environment and the custody of the Energy Commission.

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### **Risk to the Organization if This Work is Not Done:**

The proprietary software will continue to need support from the vendor, hence incurring maintenance costs. By not implementing updated software, the Energy Commission and its users are unable to benefit from improvements in technology. As users become more demanding of newer, faster services, the tool may not be adaptable to meet these service demands.

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## Benefit Statement

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### Intangible Benefits

**Process Improvements** (describe the nature of the process improvement):

The Energy Commission program staff that is using the modeling tool will have easier access to the output and performance of the model. The IT staff and the business staff will be able to collaborate in discussions with the creators of the modeling tool and enable the development of configuration changes that may improve the performance of the tool.

**Other Intangible Benefits:**

### Tangible Benefits

**Revenue Generation** (describe how revenue will be generated):

**Cost Savings** (describe how cost will be reduced):

Simulation models have a proven record of cost savings in using technology to optimize decisions making.

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**Cost Avoidance** (describe the cost and how avoided):  
 Simulation models have a proven record of cost savings in using technology to optimize decisions making. A manual approach is more costly and may require greater trial and error. The tool can help to plan around restricted and sensitive areas.

**Risk Avoidance** (describe the risk and how avoided):

**Improved Services:**  
 Service will improve with greater collaboration between the IT staff and the business staff in the development of configuration changes that may improve the performance of the tool beyond original expectations.

## Consistency

"No" Responses →		Rationale	n Rec
Enterprise Architecture	No	Upon arrival (8/18/08) of the new CIO the department began the	6/15
Business Plan	Yes		
Strategic Plan	Yes		

## Impact to Other Agencies

### Nature of Impact to Other Agencies

**Agency:** California Public Utilities Commission  
*Describe the nature of the impact:*  
 The tool will assist in the planning of transmission lines and the fulfillment of regulatory requirements.

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**Agency:** California Department of Fish and Game

*Describe the nature of the impact:*

The CEC, DFG, U.S. Fish and Wildlife Service and the U.S. Bureau of Land Management signed a Memorandum of Understanding to establish a coordinated approach with our federal partners in the expedited permitting process. This coordinated approach will significantly reduce the time and expense for developing renewable energy on

**Agency:**

*Describe the nature of the impact:*

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## Solution Alternatives

### Alternative 1:

#### In-House Hosting

Under this option, the application would be hosted in-house at CEC. This would provide the opportunity to become self-sufficient in maintaining the hardware/software infrastructure and enhance CEC's expertise with the PACT Applications.

#### Technical Considerations for Alternative 1:

There will be a need to define responsibilities and staffing needs as well as hardware/software resources. This option may require greater capital expense and ongoing support for staffing and maintenance. The ROM Costs is for internal hardware costs only. Effort Hours are estimated on the Size Estimating worksheet.

ROM Cost: \$80,000 to \$100,000 end of range must not exceed 200% of low e

### Alternative 2:

#### Third Party Hosting

Under this option, a vendor would support the hosting of the PACT Applications. This would allow CEC to divest itself of the need to have staffing and/or other resources not currently in place or planned to be in place.

#### Technical Considerations for Alternative 2:

This option will require the investigation of local Application Solution Providers (ASPs) in the area. There may be a reduction in capital expense but still requires ongoing support for staffing and maintenance. The ROM costs are external hosting costs. Configuration changes, application changes and integration costs are separate.

ROM Cost: \$100,000 to \$120,000 end of range must not exceed 200% of low e

### Alternative 3:

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### Technical Considerations for Alternative 3:

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ROM Cost: \_\_\_\_\_ to \_\_\_\_\_ end of range must not exceed 200% of low e

### Recommendation

**Comparison:**

Alternative 1	ROM Cost			Risk
In-House Hosting - Internal hardware costs	\$80,000	-	\$100,000	<i>Acquiring and</i>
Alternative 2	ROM Cost			Risk
Third Party Hosting - External hosting	\$100,000	-	\$120,000	<i>Vendor's business</i>
Alternative 3	ROM Cost			Risk
	\$0	-	\$0	

**Conclusions:**

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**Recommendation:**

The recommendation is pending the outcome of the Feasibility Study.

**Project Approach** *(if known)*

<b>System Complexity:</b>		System Business Hours: <i>(e.g., 24x7, 9am-5pm)</i> :	
Architecture	<input type="checkbox"/> Mainframe	<input checked="" type="checkbox"/> Client Server	<input type="checkbox"/> Web Based
Technology	<input type="checkbox"/> New	<input checked="" type="checkbox"/> New to Staff	<input type="checkbox"/> In-House Experience
Implementation	<input checked="" type="checkbox"/> Central Site	<input type="checkbox"/> Phased Roll-out _____	
M & O Support	<input type="checkbox"/> Contractor	<input type="checkbox"/> Data Center	<input type="checkbox"/> Project <input checked="" type="checkbox"/> In House
Procurement Approach:			
Open Procurement?		Delegated Procurement?	
Scope of Contract	<input checked="" type="checkbox"/> Development	<input checked="" type="checkbox"/> Implementation	<input type="checkbox"/> M & O <input type="checkbox"/> Other: _____
Anticipated Length of Contract:	1	Years /	0 extensions for 0