

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

768



FROM: Economic Development Agency

SUBMITTAL DATE:
July 29, 2010

SUBJECT: Southwest Justice Center Cogeneration Plant Redesign In-Principle

RECOMMENDED MOTION: That the Board of Supervisors approve in-principle the Southwest Justice Center (SWJC) Cogeneration Plant Redesign Project.

BACKGROUND: In 2006, a cogeneration plant powered by two, 16 cylinder Waukesha natural gas engines was installed at the Southwest Justice Center Campus, were installed. The natural gas powered cogeneration plant yields considerable cost savings by replacing the demand for electric power with a less expensive and cleaner natural gas fuel source.

In March and June 2008, the cogeneration plant experienced two catastrophic engine failures. The plant consists of two large 750 KW generators that produce 1500 KW of electricity. In March 2008, Engine #1 failed and in June 2008, Engine #2 failed and stopped working. Both engine failures were due to the lack of proper lubrication to the internal engine components. To determine the exact cause of the failures, both engines had to be torn down, repaired, and rebuilt.

(Continued)

Robert Field, Director
Assistant County Executive Officer/EDA

FINANCIAL DATA	Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2010/11

SOURCE OF FUNDS: Deferred maintenance	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION: APPROVE

County Executive Office Signature

BY:
Dean Deines

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Stone, seconded by Supervisor Tavaglione and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Buster, Tavaglione, Stone, Benoit and Ashley
Nays: None
Absent: None
Date: August 10, 2010
xc: EDA, CIP

Kecia Harper-Ihem
Clerk of the Board
By:
Deputy

Prev. Agn. Ref.: 3.27, 11/03/09

District: 3

Agenda Number:

3.15

Departmental Concurrence

Reviewed by
CIP TEAM
DEAN DEINES

Policy
 Policy
 Consent
 Consent

Dept's Recomm.:
 Per Exec. Ofc.:

BACKGROUND: (Continued)

Repairs to both engines were paid for by the County of Riverside's insurance carrier, McLaren's Young International, through Risk Management. During the repairs, it was determined by Endurant Energy that the engines at the SWJC plant had been designed improperly. It is critical that the plant run due to energy savings and an Agreement between the County, Southern California Edison (SCE) and The Gas Company. The main purpose of a cogeneration system is to produce electricity using natural gas which is more cost effective than to purchase the electricity through SCE. When fully operational, the cogeneration plant produces enough electricity to supply most of the electrical needs for the central plant. This is significant since the SWJC central plant is the second largest consumer of electricity among county buildings in SCE territory.

As a result of the County entering into an agreement with SCE, the County received a rebate of \$997,650 which was applied to the installation of the plant. If the cogeneration plant is not fully operational and producing electricity, SCE and The Gas Company will require that the County return the \$997,650. Therefore, to create current savings in electrical cost and to avoid substantial penalty for a non-performing system, the SWCJ cogeneration system must be redesigned to prevent future failures.