



**EXPENDITURE WITH GE PACKAGED POWER, LLC FOR  
EMERGENCY REPAIRS ON GAS TURBINES FOR RERC UNITS 1  
AND 3 DUE TO URGENT NECESSITY AND A 10% CHANGE  
ORDER AUTHORITY FOR A TOTAL COST OF \$4,983,319**

## **Riverside Public Utilities**

Board of Public Utilities  
March 23, 2020

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## **BACKGROUND**

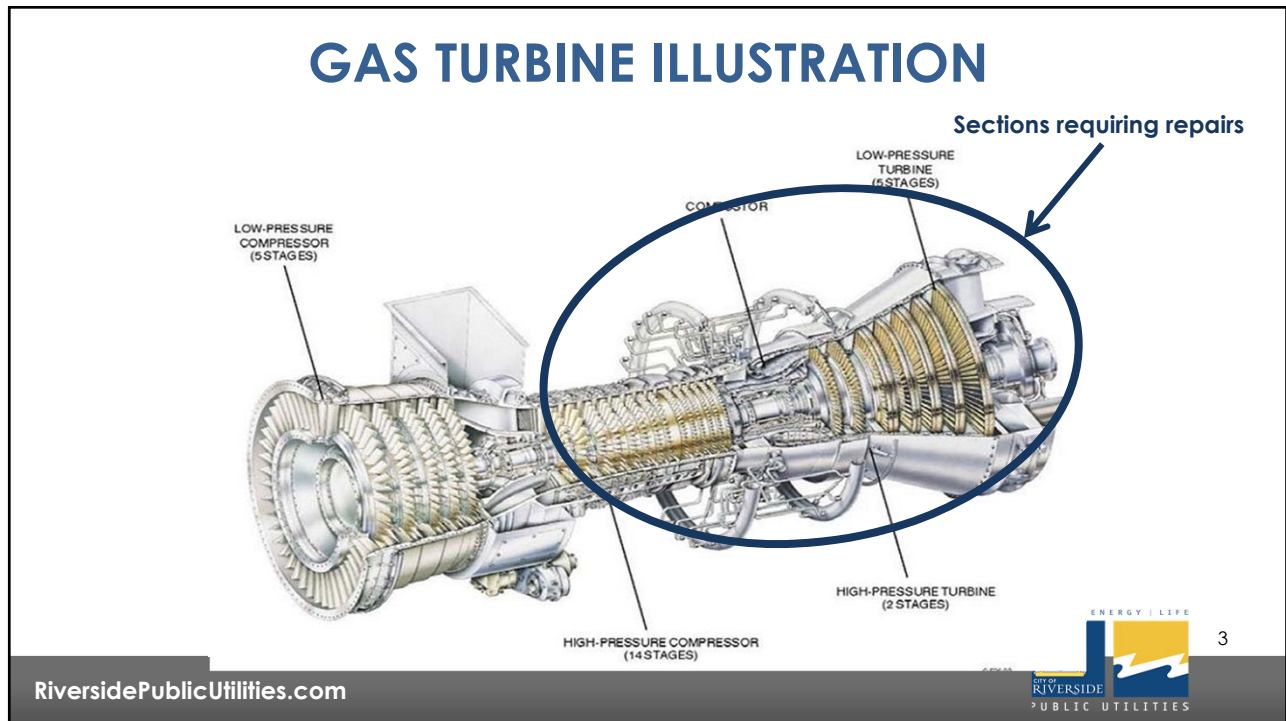
1. Riverside Energy Resource Center Units 1 & 3
  - a) Serve a critical role in meeting customer's energy demands
  - b) Provides almost all electricity during events when power is lost at or from the Vista Substation
2. Preventative maintenance conducted annually
  - a) Specialized borescope inspections of internal components
  - b) Conducted in November 2019
  - c) Cracks were identified that are above allowable limits for continued operation

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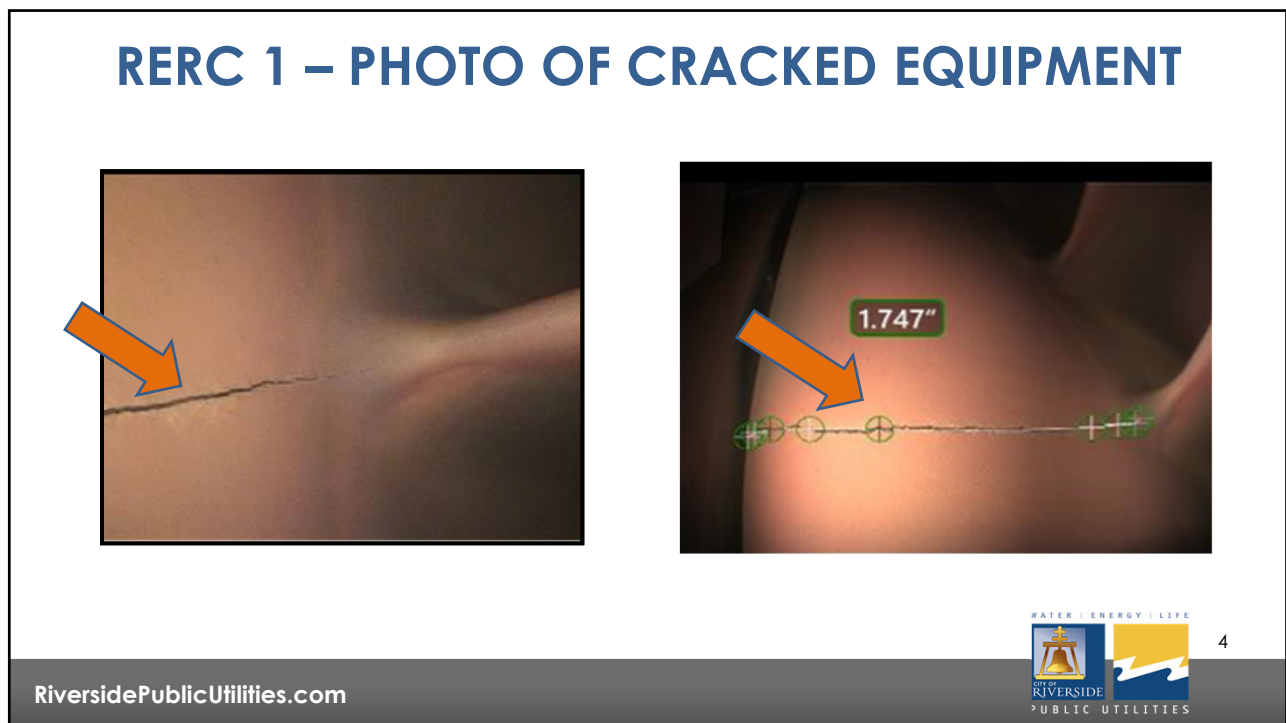


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## RERC 3 – PHOTO OF CRACKS IN EQUIPMENT



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## BACKGROUND

1. Emergency Repairs Necessary
  - a) Primary source for internal generation
  - b) Riverside's City Charter, Section 1202(b) of Article XII authorizes expenditures when it is urgent to preserve life, health or property
  - c) Extended outages of RERC 1 & RERC 3 would have substantial impacts to customers
2. Supplemental Appropriation
  - a) \$4.98 million needed to cover repair costs and contingency
  - b) Repairs on RERC 1 will be capitalized

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## DISCUSSION

1. Due to the urgency of the necessary repairs, the project was unable to be competitively bid
  - a) Section 1109 of the City Charter provides that such contracts may be let without advertising for bids if such work or supplies or materials are deemed by the City Council to be of urgent necessity for the preservation of life, health or property; and
  - b) Shall be authorized by resolution passed by at least five affirmative votes of the City Council; and
  - c) Contain a declaration of the facts constituting such urgency.

## DISCUSSION

2. Only 4 Authorized Vendors Worldwide
  - a) General Electric (GE) - Texas
  - b) TransCanada Turbine (TCT) - Canada
  - c) IHI Power System Co, Ltd (IHI) - Japan
  - d) MTU Aero Engines AG (MTU) - Germany
3. Selected Vendor for Parts and Labor
  - a) GE only fully responsive vendor and could complete work in a timely manner
  - b) Exchange of damaged components with refurbished parts

## DISCUSSION

### 4. Cost

Components and Replacement		Cost
RERC 1	Combustor, High Pressure Turbine, Low Pressure Turbine	\$3,966,955
RERC 3	Second Stage Nozzle Replacement	\$563,334
<b>Purchase Order Total</b>		<b>\$4,530,289</b>
Contingency (Not to exceed 10%)		\$453,030
<b>Total Supplemental Appropriation</b>		<b>\$4,983,319</b>

## DISCUSSION

### 5. Timeline

- a) City Council approval - Dec. 17, 2019
- b) Emergency PO issued - Dec. 18, 2019
- c) RERC1 Repairs-Jan. 6-14, 2020
- d) RERC 3 Repairs-Jan.15-24, 2020

## RERC REPAIRS

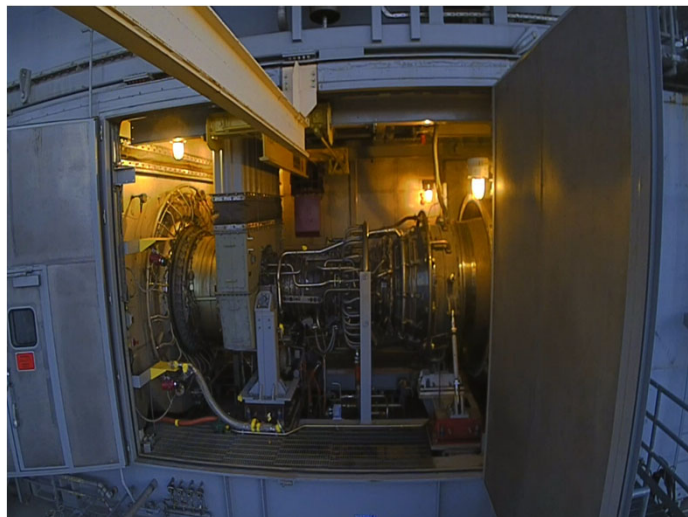


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## REPAIRS TIME LAPSE



..\\..\\COMMON\\RERC\\RERC Turbine 1min.mp4



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## RECOMMENDATION

That the Board of Public Utilities approve the expenditure for the repairs on the gas turbines for Riverside Energy Resource Center Units 1 and 3 in the amount of \$4,530,289 due to the urgent necessity for the protection and preservation of public life, health, and property, with a 10% change order authorization, for a total expenditure of \$4,983,319, in accord with City Charter section 1202(b).