

**PORT OF GALVESTON  
REQUEST FOR DISCUSSION AND TRUSTEES ACTION**

**BUSINESS ITEM**

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**PREPARED BY:**     Laura Camcioglu     Director of Administration     June 23, 2020

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**SUBJECT:**     Consider and Approve Solar Project for Cruise Terminal 2.

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**BACKGROUND:**     As part of the Port of Galveston's Green Marine Initiative, staff has reviewed the feasibility of solar implementation on Cruise Terminal 1 and 2. Using this approach, solar energy could offset about two-thirds of electricity consumption from the CenterPoint power grid. The infrastructure is capable of generating 1,200kW, with an estimated savings up to \$1.2M.

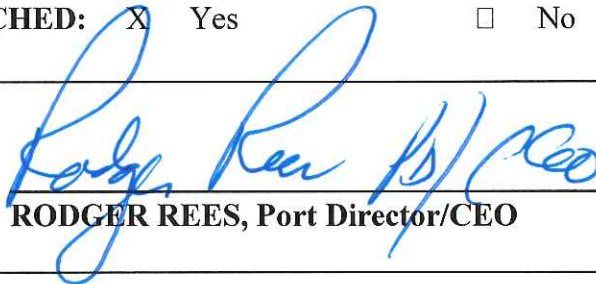
**RECOMMENDATIONS:**     The Board of Trustees of the Galveston Wharves is respectfully requested to review the recommended project and authorize the Port Director to enter into a Power Purchase Agreement consistent with the terms discussed.

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**ADDITIONAL INFORMATION ATTACHED:**      Yes      No

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**Respectfully Submitted By:**

  
**RODGER REES, Port Director/CEO**

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**DATE ACTION TAKEN:** \_\_\_\_\_

**Approved:** \_\_\_\_\_

**Motion By:** \_\_\_\_\_

**Disapproved:** \_\_\_\_\_

**Seconded By:** \_\_\_\_\_

**Deferred To:** \_\_\_\_\_

**Unanimous:**      Yes      No

**Incorporated into Minutes:** \_\_\_\_\_

**By:** \_\_\_\_\_

## PORT OF GALVESTON Briefing

### CONSIDER AND APPROVE SOLAR PROJECT FOR CRUISE TERMINAL 2.

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#### Background

As part of the Port of Galveston's Green Marine Initiative, staff has reviewed the feasibility of solar implementation on Cruise Terminal 1 and 2.

The recommended solar infrastructure was specifically designed and uniquely tailored for both Cruise Terminal 1 and Cruise Terminal 2. These facilities make up 60% of the Port's total energy usage. Using this approach, solar energy is anticipated to offset about two-thirds of electricity consumption from the CenterPoint power grid. The infrastructure consists of 5,000-7,500 solar panels, capable of generating 995-2500kW, with an estimated savings up to \$3M.

Per your request, and in follow-up to the February 25th Galveston Wharves Board Meeting, alternative scenarios were analyzed. Driven primarily by different re-roofing options as well as consideration for the aerial rights above Cruise Terminal 1, the following were calculated to determine the economic benefit of three options: (1) Cruise Terminals 1 and 2, (2) Cruise Terminal 1 with partial roof infrastructure and Cruise Terminal 2, and (3) Cruise Terminal 2 with no roof repairs.

	<u>Solar Size</u>	<u>Solar Location</u>	<u>Roof Replacement</u>	<u>Est. Year 1 Electricity Savings</u>	<u>Est. 25-Yr Cumulative Electricity Savings</u>
Option 1	2,500 kW	All of CT 1 & CT 2	All of CT1	(\$24,000)	(\$3,000,000)
Option 2	1,600 kW	All CT2, Part of CT1	Part of CT1	(\$17,500)	(\$1,200,000)
Option 3	995 kW	CT2 Only	None	(\$2,840)	(\$1,000,000)

#### Current Situation

Staff is recommending Option 3.

#### Fiscal Impact

Over the 25-year project life, we expect savings of \$1M

#### Staff Recommendation

The staff recommends Option 3. In order to capture key tax credits that expire at year-end 2020, timing is of the essence. Legal has reviewed the solar contract and sees no obstacle to executing. Solar installation and re-roofing would begin in Q3-2020 and be complete by Q4-2020.