CITY COUNCIL

STUDY SESSION AGENDA

OF

JULY 18, 2016

North Augusta

South Carolina's Riverfront

NOTES

Administration Department

North Augusta
South Carolina's Riverfront

Interoffice Memorandum

TO: Mayor and City Council

FROM: B. Todd Glover, City Administrator

DATE: July 15, 2016

SUBJECT: Study Session Date of Monday, July 18, 2016

A study session of the North Augusta City Council has been scheduled for **Monday, July 18, 2016, at 6:00 p.m.** in the Municipal Center 3rd Floor Council Conference Room/Council Chambers located at 100 Georgia Avenue. **PLEASE NOTE THE NEW TIME OF 6:00 P.M.**

The following are among the topics for discussion and review:

ITEM 1. CITY COUNCIL AGENDA: Items on the July 18, 2016 Council Agenda – Council Discussion

At this time, any questions related to the agenda scheduled for tonight's meeting may be discussed.

ITEM 2. FINANCE: Franchise Request by Crown Castle – Council Consensus

Representatives from Crown Castle presented a franchise request at the May 16, 2016 study session. Council consensus regarding this matter is requested.

ITEM 3. Parks, Recreation, & Tourism: Funding for Riverview Park Gym Additions – Council Update

The North Augusta Parks, Recreation, & Tourism Department Director, Rick Meyer; City Administrator, Todd Glover; and Finance Director, Cammie Hayes will review the financial options at reprioritizing funding in Sales Tax III to cover the costs of the new gym additions at Riverview Park.

ITEM 4. Parks, Recreation, & Tourism: Solar Panels Request – Council Update

A request to install solar panels on the roof of the Riverview Park Activities Center has been made by Southern View Energy. Director of Parks, Recreation, and Tourism, Rick Meyer, will update Mayor and Council on the request.

Please see **SS ATTACHMENT NO. 4** for additional information.

ITEM 5. LEGAL: Executive Session – Request of the City Administrator

In compliance with Section 30-4-70 (a) (5) the City Administrator has requested an executive session for the purpose of:

(5) Discussion of matters relating to the proposed location, expansion, or the provision of services encouraging location or expansion of industries or other businesses in the area served by the public body.

Discussion of Project Jackson's Master Development Agreement

SOUTHERN VIEW
ENERGY

Years 11 – 25 (Option1) All power generated under true net metering will be at a value of $.115 cents per KWH. We propose that the investor receive $.08 cents per KWH and the City of North Augusta receive $.035 cents per KWH. The differential values are due do the fact that the investor is still required to maintain insurance and maintenance on the system.

Years 11 – 25 (Option 2) We estimate that the combined overall value of the energy generated to be at a value of $.085 cents per KWH. However, this is an estimate! We propose that 70% of production go to the Investor and 30% of the production go to the City of North Augusta. Again, the differential is due to the fact that the insurance and maintenance will be on the responsibility of the investor. The monetized value of this will be described below.

Under both options 1 and 2, the interconnection location will be located behind the meter at the Activities Center. This means that no checks will be administered by SCE&G after year 10. The values of the production will be noticed in a reduction in the power bill to the Activities Center. In order to validate the worth of the KWH production, revenue grade metering will be installed on the array to determine total production. Also, CT's will be placed on the load side of the Activities Center as well as the load side of the solar array. A simple math calculation of subtraction will determine the amount of energy generated by the array vs. the amount that is purchased at avoided cost rates. This will allow both parties to quantify the true value of the production and a bill will be given by the investor to the hospital for the rate and quantity of the production each month.

Array size: 375 KW
Array Production: 1259KWH per KW installed (Value determined through PVSYST
Yearly Production: 1259 x 375 = 471,236 KWH (adjusted)

Years 1 – 10 (Value represents month 1. Annual production will degrade at .005% per year

Investor
471,236KWH x $.1675 = $78,932 per year

City of North Augusta
471,236 KWH x $.0525 = $24,732 per year

Years 11 – 25

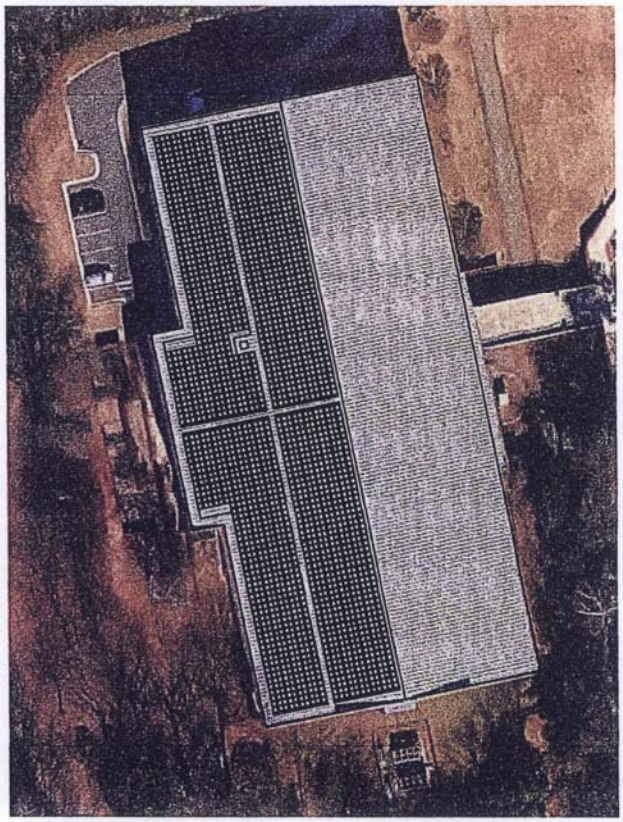
Investor
427272 x $.08 = $34,181 per year (Option 1)
427272 x $.0595 = $25,422 per year (Option 2)

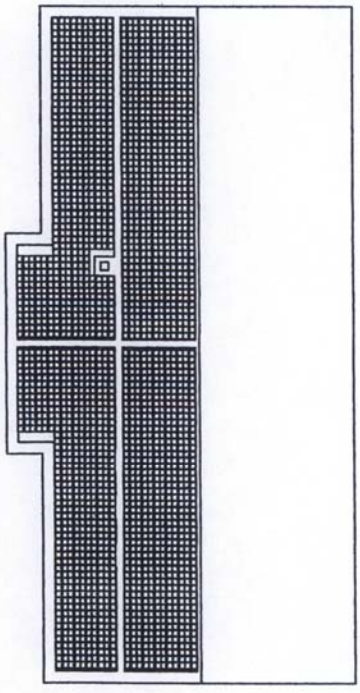
City of North Augusta
427,272 x $.035 = $14,954 per year (Option 1)
427,272 x $.0255 = $10,895 per year (Option2)

Estimated 25 Year Savings for City of North Augusta → >$420,000 Cost to City – Loss of Roof Control

Option to Buy Clause Available After Year 10 : Terms Negotiable

Riverview Park Center 375kW DC





SYSTEM SPECIFICATIONS

• SYSTEM SIZE	374.4kW DC
• MODULE TYPE	Canadian Solar 320W
• INVERTER TYPE	SolarEdge 20kW
• MODULE QTY	1170
• INVERTER QTY	15

THIS DRAWING IS NOT TO SCALE AND CANNOT BE USED FOR CONSTRUCTION OR INSTALLATION PURPOSES.

INITIAL PROJECT OVERVIEW DRAWING

Riverview Park Activities Center
100 Riverview Park Drive
North Augusta, SC 29841

NABCEP CERTIFIED
PV Installation Professional
T. Scott Earp
Cert # 031310-59

SOUTHERN VIEW ENERGY

CanadianSolar

MAXPOWER CS6X-310|315|320P

The high quality and reliability of Canadian Solar's modules is ensured by 15 years of experience in module manufacturing, well-engineered module design, stringent BOM quality testing, an automated manufacturing process and 100% EL testing.

KEY FEATURES

- Excellent module efficiency of up to 16.68 %
- Outstanding low irradiance performance: 96.0 %
- Positive power tolerance of up to 5 W
- High PTC rating of up to 91.97%
- IP67 junction box for long-term weather endurance
- Heavy snow load up to 5400 Pa, wind load up to 2400 Pa
- Salt mist, ammonia and blowing sand resistance, apply to seaside, farm and desert environments*

25 years **linear power output warranty**

10 years **product warranty on materials and workmanship**

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2008 / Quality management system
ISO/TS 16949:2009 / The automotive industry quality management system
ISO 14001:2004 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

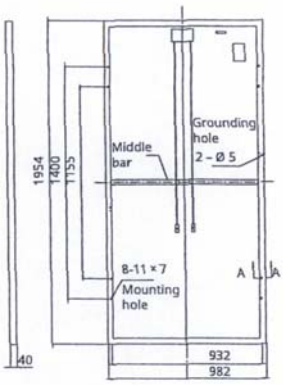
IEC 61215 / IEC 61730: VDE / MCS / CE / SII / CEC AU / INMETRO
UL 1703 / IEC 61215 performance: CEC listed (US)
UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE / IEC 60068-2-68: SGS
Take-e-way / UNI 9177 Reaction to Fire: Class 1

* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

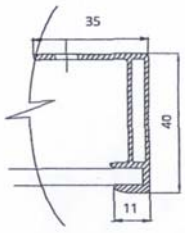
CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading manufacturer of solar modules and PV project developer with over 14 GW of premium quality modules deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

ENGINEERING DRAWING (mm)

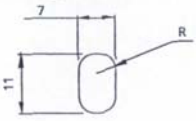
Rear View



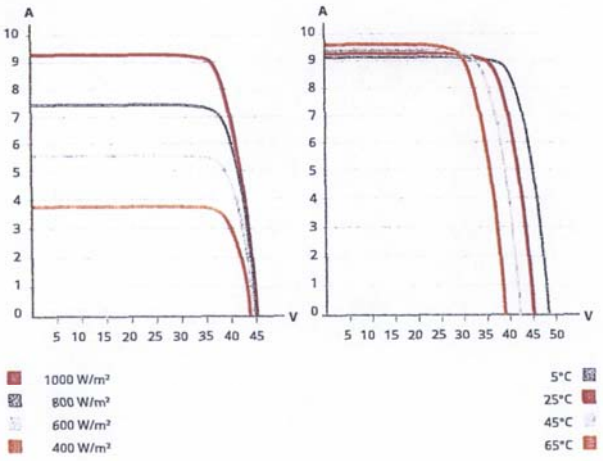
Frame Cross Section A-A



Mounting Hole



CS6X-320P / I-V CURVES



ELECTRICAL DATA / STC*

CS6X	310P	315P	320P
Nominal Max. Power (Pmax)	310 W	315 W	320 W
Opt. Operating Voltage (Vmp)	36.4 V	36.6 V	36.8 V
Opt. Operating Current (Imp)	8.52 A	8.61 A	8.69 A
Open Circuit Voltage (Voc)	44.9 V	45.1 V	45.3 V
Short Circuit Current (Isc)	9.08 A	9.18 A	9.26 A
Module Efficiency	16.16 %	16.42 %	16.68 %
Operating Temperature	-40°C ~ +85°C		
Max. System Voltage	1000 V (IEC) or 1000 V (UL)		
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)		
Max. Series Fuse Rating	15 A		
Application Classification	Class A		
Power Tolerance	0 ~ + 5 W		

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA / NOCT*

CS6X	310P	315P	320P
Nominal Max. Power (Pmax)	225 W	228 W	232 W
Opt. Operating Voltage (Vmp)	33.2 V	33.4 V	33.6 V
Opt. Operating Current (Imp)	6.77 A	6.84 A	6.91 A
Open Circuit Voltage (Voc)	41.3 V	41.5 V	41.6 V
Short Circuit Current (Isc)	7.36 A	7.44 A	7.50 A

* Under Nominal Operating Cell Temperature (NOCT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

PERFORMANCE AT LOW IRRADIANCE

Industry leading performance at low irradiance, average relative efficiency of 96.0 % from an irradiance of 1000 W/m² to 200 W/m² (AM 1.5, 25°C).

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Caution: For professional use only. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the modules.

MECHANICAL DATA

Specification	Data
Cell Type	Poly-crystalline, 6 inch
Cell Arrangement	72 (6×12)
Dimensions	1954×982×40 mm (76.9×38.7×1.57 in)
Weight	22 kg (48.5 lbs)
Front Cover	3.2 mm tempered glass
Frame Material	Anodized aluminium alloy
J-Box	IP67, 3 diodes
Cable	4 mm² (IEC) or 4 mm² & 12 AWG 1000V (UL), 1150 mm (45.3 in)
Connectors	Friends PV2a (IEC), Friends PV2b (IEC / UL)
Standard Packaging	26 pieces, 620 kg (1366.9 lbs) (quantity & weight per pallet)
Module Pieces per Container	624 pieces (40' HQ)

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.41 % / °C
Temperature Coefficient (Voc)	-0.31 % / °C
Temperature Coefficient (Isc)	0.053 % / °C
Nominal Operating Cell Temperature	45±2 °C

PARTNER SECTION

Scan this QR-code to discover solar projects built with this module

SCE&G Renewable Energy

Non-Residential Programs

	NET ENERGY METERING	BILL CREDIT AGREEMENT (BCA)
MAXIMUM PRODUCTION	1,000 kW *(May offset all/part of energy usage or not more than 100% of contract demand)*	1,000 kW *(May offset all/part of energy usage or not more than 100% of contract demand)*
SYSTEM LOCATION	Onsite (Owned or leased)	Onsite (Owned or leased)
PROGRAM DESCRIPTION	For every kWh generated, customer offsets their own energy usage and receives an energy credit for excess generation put back on the grid.	Buy under your current rate for electric service. Receive an SCE&G bill credit for all your solar generation.
COMPENSATION FOR GENERATION	Receive an energy credit for any excess energy at the same energy rate as your current electric service.	Sell all solar energy to SCE&G at a bill credit rate based on the size of the customer's solar system. **Bill Credit per kWh** / **System Size** $0.20 — 0 kW < size ≤ 20 kW $0.18 — 20 kW < size ≤ 100 kW $0.14 — 100 kW < size ≤ 1000 kW $0.22 — Qualifying Tax Exempts *Subject to annual adjustments for new participants.* BCA may be assigned to customer's lessor or installer. **Qualifying Tax Exempts** Churches – **Rate 12** Schools – **Rate 22** Municipalities – **Rate 3**
TERM	Available through 12/31/2025 for customers signed up by 12/31/2020.	Bill credit fixed for a 10-year term. BCA available to new customers thru 12/31/2020.
BILLING	If you generate more energy than you use, you receive an energy credit on your monthly bill. If you use more energy than you generate, you owe the net amount.	Credits appear on your monthly bill based on the total output from your solar system. Any excess credit is carried forward to offset future charges.
ANNUAL TRUE-UP	Annual bill credit at avoided cost for any remaining excess energy during the November billing cycle.	Annual payment for any remaining excess credits over $600 during the November billing cycle.
METER REQUIREMENTS	Two (2) Meters One for solar system and one for your business.	Two (2) Meters One for solar system and one for your business.
INTERCONNECTION FEES	Application Fee ≤ 100 kW $250 > 100 kW Fee based on system size	Application Fee ≤ 100 kW $250 > 100 kW Fee based on system size
ARE RENEWABLE ENERGY CREDITS (RECs) AVAILABLE TO CUSTOMERS?	RECs are retained by SCE&G under this program.	RECs are retained by SCE&G under this program.

All kW references are A/C.

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