

Lower Cape Fear Water & Sewer Authority
Regular Board Meeting Minutes
August 21st, 2023

Chairman Blanchard called to order the Authority meeting scheduled on August 21st, 2023, at 9:00 a.m. and welcomed everyone present. The meeting was held at the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina. Director DeVane gave the invocation.

Roll Call by Chairman Blanchard:

Present: Norwood Blanchard, Patrick DeVane, Wayne Edge, Harry Knight, Jackie Newton, Scott Phillips, Charlie Rivenbark, Chris Smith, Bill Sue, Phil Tripp, and Frank Williams

Present by Virtual Attendance: Al Leonard and Bill Saffo

Absent: Rob Zapple

Staff: Tim H. Holloman, Executive Director; Matthew Nichols, General Counsel; Tony Boahn P.E., McKim & Creed Sam Boswell, COG; and Danielle Hertzog, Financial Administration Assistant

Guests Present: Glenn Walker, Brunswick County Water Resources Manager; Jorgen Holmberg, Computer Warriors; Kenny Keel, Pender County Public Utilities Director; Jess Powell P.E., McKim & Creed; Kristen Hole, Cape Fear Solar Systems; and Robert Parker, Cape Fear Solar Systems.

Guests Virtual Attendance: Tom Hendrick, Pender County Utilities Water Treatment Plant Superintendent; Benjamin Kearns, Cape Fear Public Utility Authority Water Recourses Manager Water Treatment; John Nichols, Brunswick County Public Utilities Director; and Ken Waldroup, Cape Fear Public Utility Authority Executive Director

PLEDGE OF ALLEGIANCE: Chairman Blanchard led the Pledge of Allegiance.

APPROVAL OF CONSENT AGENDA

C1 – Minutes of July 10, 2023, Regular Board Meeting

C2 – Kings Bluff Monthly Operations and Maintenance Report

C3 – Bladen Bluffs Monthly Operations and Maintenance Reports

C4 – Line-item Adjustment for June 30, 2023

Motion: Director Sue **MOVED**; seconded by Director Rivenbark, approval of the Consent Agenda Items C1-C4 as presented. Upon voting, the **MOTION CARRIED UNANIMOUSLY**.

NEW BUSINESS

NB1 – Presentation by Cape Fear Solar Systems Solar Proposal

The presentation is attached to the minutes.

NB2 – Consider approval of the Preliminary Engineering Report for the Air backwash and Walkway.

Executive Director Holloman advised that the Engineering services proposal would be for phase one of the board-approved Air Backwash and Access Walkway Building replacement. Tony Boahn stated this is for an initial study to develop a matrix of options, materials, and construction methods.

Motion: Director DeVane **MOVED**, seconded by Director Phillips, to approve the Preliminary Engineering Report for the Air backwash and Walkway. Upon voting, the **MOTION CARRIED**.

NB3 – Consider approval of the Partial Roof Replacement at Kings Bluff – Engineering/ Bid/ Construction Management.

A) Resolution of Lower Cape Fear Water & Sewer Authority Exempting Lower Cape Fear Water & Sewer Authority from The Provisions of N.C.G.S. §143-64.31

Motion: Director Rivenbark **MOVED**, seconded by Director Williams, to approve the Resolution of Lower Cape Fear Water & Sewer Authority Exempting Lower Cape Fear Water & Sewer Authority from The Provisions of N.C.G.S. §143-64.31. Upon voting, the **MOTION CARRIED**.

B) Approve the Partial Standing Seam Metal Roof Replacement Proposal

Executive Director Holloman advised McKim and Creed will oversee this process with a design-build and the bid process.

Motion: Director Phillips **MOVED**, seconded by Director Rivenbark, to approve the Partial Standing Seam Metal Roof Replacement Proposal. Upon voting, the **MOTION CARRIED UNANIMOUSLY**.

ENGINEER'S COMMENTS

Jess Powell gave an update on the Livingston Creek aerial pipe joint repair. He is glad to say the repair is complete. Mr. Powell advised McKim & Creed has started work on the Kings Bluff Raw Water Main Phase 2 with Garney. For this project, they are looking at material cost and installation. Four materials are being examined: PVC, FPVC, Ductile, and Steel. After looking at the price, steel was the lowest cost. Jess has been working with Dupont, DAK Industries, and Coastal Land Trust to acquire additional easements. Mr. Powell was about to get in touch with CSX. CSX advised that the AK spur is no longer used or needed by them. Therefore, McKim & Creed is looking into utilizing that corridor for the new pipeline. If approved, this will cut about two and half a mile off the pipeline's total distance and be a two-million-dollar savings.

ATTORNEY COMMENTS

No comments

EXECUTIVE DIRECTOR REPORT

EDR1 – Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date Ending June 30, 2023

Executive Director Holloman reported that during July 2023, Brunswick County was above projections.

DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS

No comments

PUBLIC COMMENT

No comments

ADJOURNMENT

There being no further business, Chairman Blanchard adjourned the meeting at 10:06 a.m.

Respectfully Submitted:


Patrick DeVane Secretary

CAPE FEAR SOLAR SYSTEMS

Prepared For
Lower Cape Fear Water & Sewer
Authority
(910) 383-1919

LCFWASA 1.3MW Solar Proposal

Prepared By
Will Parker
(910) 777-3749
will@capefearsolarsystems.com

6/30/2023



Cape Fear Solar Systems has been installing in Southeastern North Carolina since 2007. With NABCEP Certified Designers and Installers we have maintained a standard of excellence in over 1500 projects. The elegance and accuracy of our work is evident in every system and our customers are happy to share their experiences with you.



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| 4.1 Cash Purchase | 7 |

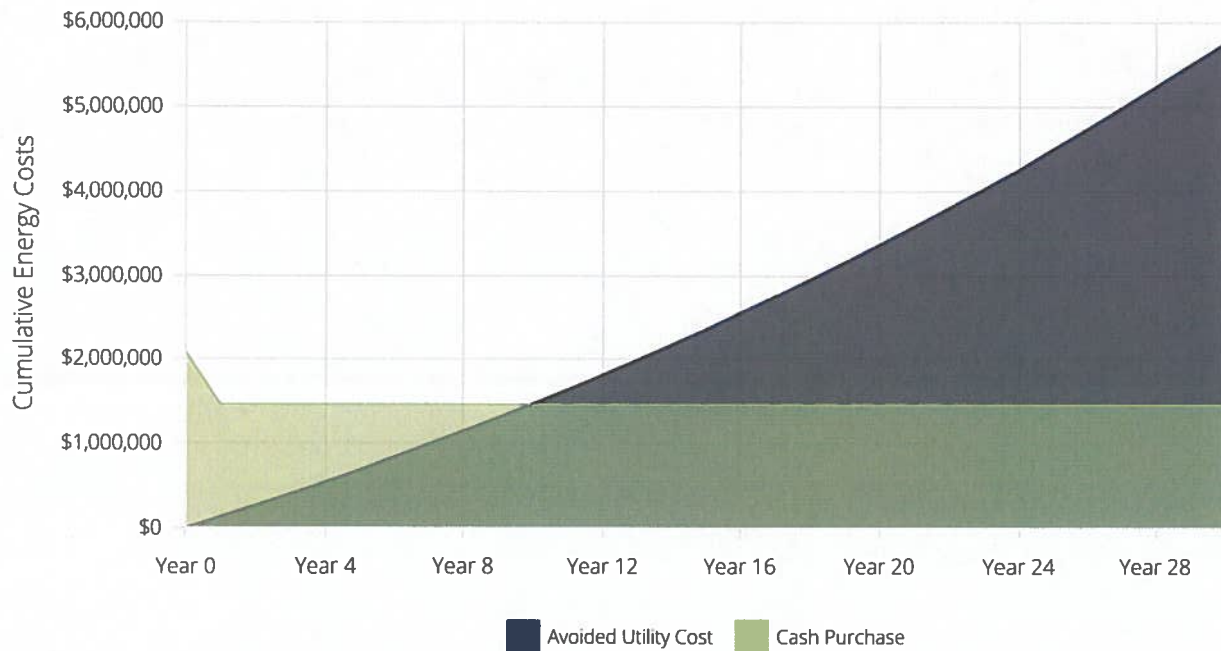
1 Project Summary

| | |
|------------------------------|---------------|
| Payment Options | Cash Purchase |
| IRR - Term | 10.2% |
| LCOE PV Generation | \$0.030 /kWh |
| Net Present Value | \$1,215,238 |
| Payback Period | 9.9 Years |
| Total Payments | \$2,089,293 |
| Total Incentives | \$626,788 |
| Net Payments | \$1,462,505 |
| Electric Bill Savings - Term | \$5,763,003 |
| Upfront Payment | \$2,089,293 |

Combined Solar PV Rating

Power Rating: 1,303,800 W-DC

Cumulative Energy Costs



2.1.1 PV System Details

General Information

Facility: Meter #1
 Address: 246 Private Rd, Riegelwood, NC, 28456

Solar PV Equipment Description

Solar Panels: (2460) HT-SAAE HT72-18X
 Inverters: (20) SMA America STP 50-US-41

Solar PV Equipment Warranty

Solar Panels: 25 Years
 Inverters: 10 Years

Solar PV System Cost and Incentives

Solar PV System Cost \$2,089,293

Direct pay - 30% ITC **-\$626,788**

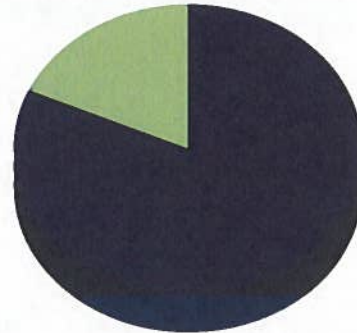
Net Solar PV System Cost \$1,462,505

Solar PV System Rating

Power Rating: 1,303,800 W-DC
 Power Rating: 1,000,000.0 W-AC

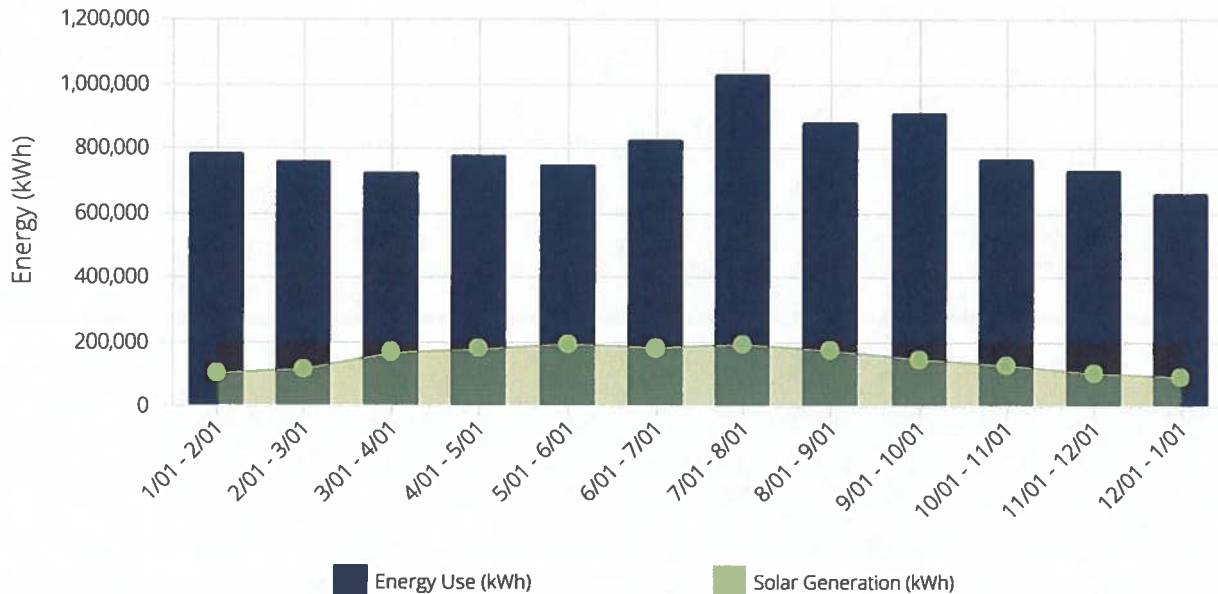
Energy Consumption Mix

Annual Energy Use: 9,575,841 kWh



Utility 7,814,645 kWh (81.61%)
 Solar PV 1,761,196 kWh (18.39%)

Monthly Energy Use vs Solar Generation



2.1.2 Rebates and Incentives

This section summarizes all incentives available for this project. The actual rebate and incentive amounts for this project are shown in each example.

Direct Pay, Investment Tax Credit (ITC) - 30%

The Inflation Reduction Act (IRA) of 2022 contains a "direct pay" provision that enables certain tax-exempt customers, including state and local government, to receive a direct cash payment in lieu of an investment tax credit (ITC). Entities that qualify for direct pay are eligible to receive a 30% direct payment, assuming they meet the IRA established prevailing wage and apprenticeship requirements in order to qualify for the full 30% "increased rate", rather than a 6% "base rate". The IRA states that direct pay is only available for entities, including: an entity exempt from the tax, any State government (or political subdivision thereof), the Tennessee Valley Authority, an Indian tribal government, an Alaska Native Corporation, any corporation operating on a cooperative basis which is engaged in furnishing electric energy to persons in rural areas. These entities may take direct pay for solar and storage in the ITC and PTC as well as the ITC/PTC when tech neutral starts after 2025.

Total Incentive Value: \$626,788

Annual Electricity Savings: \$132,160

3.1 Cash Purchase

Assumptions and Key Financial Metrics

| | | | | | |
|-----------------------------|-------------|-------------------------|-------------|-----------------------|-----------|
| IRR - Term | 10.2% | Net Present Value | \$1,215,238 | Payback Period | 9.9 Years |
| ROI | 205.8% | PV Degradation Rate | 0.50% | Discount Rate | 5.0% |
| Energy Cost Escalation Rate | 3.0% | Federal Income Tax Rate | 30.0% | State Income Tax Rate | 5.0% |
| Total Project Costs | \$2,089,293 | | | | |

| Years | Project Costs | Direct pay - 30% ITC | Electric Bill Savings | PV Generation (kWh) | Total Cash Flow | Cumulative Cash Flow |
|---------|---------------------|----------------------|-----------------------|---------------------|---------------------|----------------------|
| Upfront | -\$2,089,293 | - | - | - | -\$2,089,293 | -\$2,089,293 |
| 1 | - | \$626,788 | \$132,160 | 1,761,196 | \$758,948 | -\$1,330,345 |
| 2 | - | - | \$135,444 | 1,752,390 | \$135,444 | -\$1,194,901 |
| 3 | - | - | \$138,807 | 1,743,584 | \$138,807 | -\$1,056,094 |
| 4 | - | - | \$142,249 | 1,734,778 | \$142,249 | -\$913,845 |
| 5 | - | - | \$145,772 | 1,725,972 | \$145,772 | -\$768,073 |
| 6 | - | - | \$149,380 | 1,717,166 | \$149,380 | -\$618,693 |
| 7 | - | - | \$153,072 | 1,708,360 | \$153,072 | -\$465,621 |
| 8 | - | - | \$156,851 | 1,699,554 | \$156,851 | -\$308,770 |
| 9 | - | - | \$160,720 | 1,690,748 | \$160,720 | -\$148,050 |
| 10 | - | - | \$164,679 | 1,681,942 | \$164,679 | \$16,629 |
| 11 | - | - | \$168,732 | 1,673,136 | \$168,732 | \$185,360 |
| 12 | - | - | \$172,879 | 1,664,330 | \$172,879 | \$358,239 |
| 13 | - | - | \$177,123 | 1,655,524 | \$177,123 | \$535,362 |
| 14 | - | - | \$181,466 | 1,646,718 | \$181,466 | \$716,829 |
| 15 | - | - | \$185,911 | 1,637,912 | \$185,911 | \$902,739 |
| 16 | - | - | \$190,459 | 1,629,106 | \$190,459 | \$1,093,198 |
| 17 | - | - | \$195,112 | 1,620,300 | \$195,112 | \$1,288,310 |
| 18 | - | - | \$199,873 | 1,611,494 | \$199,873 | \$1,488,183 |
| 19 | - | - | \$204,744 | 1,602,688 | \$204,744 | \$1,692,927 |
| 20 | - | - | \$209,728 | 1,593,882 | \$209,728 | \$1,902,655 |
| 21 | - | - | \$214,826 | 1,585,076 | \$214,826 | \$2,117,481 |
| 22 | - | - | \$220,042 | 1,576,270 | \$220,042 | \$2,337,523 |
| 23 | - | - | \$225,377 | 1,567,464 | \$225,377 | \$2,562,900 |
| 24 | - | - | \$230,834 | 1,558,658 | \$230,834 | \$2,793,734 |
| 25 | - | - | \$236,416 | 1,549,852 | \$236,416 | \$3,030,150 |
| 26 | - | - | \$242,125 | 1,541,046 | \$242,125 | \$3,272,275 |
| 27 | - | - | \$247,963 | 1,532,240 | \$247,963 | \$3,520,238 |
| 28 | - | - | \$253,934 | 1,523,434 | \$253,934 | \$3,774,172 |
| 29 | - | - | \$260,041 | 1,514,628 | \$260,041 | \$4,034,213 |
| 30 | - | - | \$266,285 | 1,505,822 | \$266,285 | \$4,300,498 |
| Totals: | -\$2,089,293 | \$626,788 | \$5,763,003 | 49,005,270 | \$4,300,498 | - |

4.1 Cash Purchase

Assumptions and Key Financial Metrics

| IRR - Term | 10.2% | Net Present Value | \$1,215,238 | Payback Period | 9.9 Years | | | | | | | |
|-----------------------------|-------------|-------------------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ROI | 205.8% | PV Degradation Rate | 0.50% | Discount Rate | 5.0% | | | | | | | |
| Energy Cost Escalation Rate | 3.0% | Federal Income Tax Rate | 30.0% | State Income Tax Rate | 5.0% | | | | | | | |
| Total Project Costs | \$2,089,293 | | | | | | | | | | | |
| Years | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| Cash | | | | | | | | | | | | |
| Project Costs | - | - | - | - | - | - | - | - | - | - | - | - |
| Direct pay - 30% ITC | - | - | - | - | - | - | - | - | - | - | - | - |
| Electric Bill Savings | \$172,879 | \$177,123 | \$181,466 | \$185,911 | \$190,459 | \$195,112 | \$199,873 | \$204,744 | \$209,728 | \$214,826 | \$220,042 | \$225,377 |
| Cash Total | \$172,879 | \$177,123 | \$181,466 | \$185,911 | \$190,459 | \$195,112 | \$199,873 | \$204,744 | \$209,728 | \$214,826 | \$220,042 | \$225,377 |
| Total Cash Flow | \$172,879 | \$177,123 | \$181,466 | \$185,911 | \$190,459 | \$195,112 | \$199,873 | \$204,744 | \$209,728 | \$214,826 | \$220,042 | \$225,377 |
| Cumulative Cash Flow | \$358,239 | \$535,362 | \$716,829 | \$902,739 | \$1,093,198 | \$1,288,310 | \$1,488,183 | \$1,692,927 | \$1,902,655 | \$2,117,481 | \$2,337,523 | \$2,562,900 |

4.1 Cash Purchase

Assumptions and Key Financial Metrics

| | | | | | |
|-----------------------------|-------------|-------------------------|-------------|-----------------------|-----------|
| IRR - Term | 10.2% | Net Present Value | \$1,215,238 | Payback Period | 9.9 Years |
| ROI | 205.8% | PV Degradation Rate | 0.50% | Discount Rate | 5.0% |
| Energy Cost Escalation Rate | 3.0% | Federal Income Tax Rate | 30.0% | State Income Tax Rate | 5.0% |
| Total Project Costs | \$2,089,293 | | | | |

| Years | 24 | 25 | 26 | 27 | 28 | 29 | 30 | Totals |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------|
| Cash | | | | | | | | |
| Project Costs | - | - | - | - | - | - | - | -\$2,089,293 |
| Direct pay - 30% ITC | - | - | - | - | - | - | - | \$626,788 |
| Electric Bill Savings | \$230,834 | \$236,416 | \$242,125 | \$247,963 | \$253,934 | \$260,041 | \$266,285 | \$5,763,003 |
| Cash Total | \$230,834 | \$236,416 | \$242,125 | \$247,963 | \$253,934 | \$260,041 | \$266,285 | \$4,300,498 |
| Total Cash Flow | \$230,834 | \$236,416 | \$242,125 | \$247,963 | \$253,934 | \$260,041 | \$266,285 | \$4,300,498 |
| Cumulative Cash Flow | \$2,793,734 | \$3,030,150 | \$3,272,275 | \$3,520,238 | \$3,774,172 | \$4,034,213 | \$4,300,498 | - |