



# Solar RFP Information

March 6, 2020

# Requested in RFP

- **Solar Installation at Avon Elementary School & Woodland Middle School**
  - **Avon- Solar to go over new roofs paid for by the solar Financier**
  - **Woodland- Solar to go over existing shingled roofs while roof maintenance work will take place as well**
- **PPA (Power Purchase Agreement) rates that are comparable or better than current PSEG kwh rates**
- **Include costs associated with roof replacements within the PPA rates**

# PPA Details

- 1. Solar PPA is a contract signed between the district and the “financier” which in this case is Greenskies Renewable Energy**
- 2. Through the PPA the district purchases energy produced by the solar array for a fixed rate of \$0.095/kWh over 15 years**
- 3. At the end of the 15 year term, the district has three options**
  - 1. To extend the PPA for 5 years**
  - 2. To purchase the solar at “Fair Market Value”**
  - 3. To have the Financier remove the system with no cost to the district.**

# Roof Work

- 1. Extensive roof work at Avon Elementary School including new shingles over pitched roof's and silicone membrane over barrel roof**
- 2. Light roof work at Woodland including patching over flat roof section**
- 3. The proposed price of \$0.0950 per kilowatt hour (kWh) with a 0% escalator was selected including a roof work budget of \$450k in accordance with the terms stated in the RFP and its addenda.**

# Contractors/Winning Bidder:

- **The Solar PPA is hereby awarded to Pfister Energy/Greenskies Renewable Energy, LLC**
  - **Greenskies Renewable Energy (financier)**
    - **Will finance the installation of, own and operate the solar array's at each school**
    - **Founded in 2009 from Middletown, CT**
    - **Constructed and operates 233 Megawatts of solar throughout the country**
  - **Pfister Energy (installer)**
    - **Will design and install the solar array's**
    - **Founded in 2005 from Hawthorne, NJ**
    - **Sister company to Pfister Roofing which has been in business for 37 years**

# PPA Financial Proforma

Year	Solar Production (kwh)	Estimated Utility Rate	Estimated Solar Value	PPA Fixed rate	PPA Payment	Annual Cashflow	Cumulative Cashflow
1	543,720	\$ 0.110	\$ 59,809	\$ 0.095	\$ 51,653	\$ 8,156	\$ 8,156
2	543,720	\$ 0.112	\$ 61,005	\$ 0.095	\$ 51,653	\$ 9,352	\$ 17,508
3	541,001	\$ 0.114	\$ 61,914	\$ 0.095	\$ 51,395	\$ 10,519	\$ 28,027
4	538,296	\$ 0.117	\$ 62,837	\$ 0.095	\$ 51,138	\$ 11,699	\$ 39,726
5	535,605	\$ 0.119	\$ 63,773	\$ 0.095	\$ 50,882	\$ 12,891	\$ 52,616
6	532,927	\$ 0.121	\$ 64,723	\$ 0.095	\$ 50,628	\$ 14,095	\$ 66,712
7	530,262	\$ 0.124	\$ 65,688	\$ 0.095	\$ 50,375	\$ 15,313	\$ 82,025
8	527,611	\$ 0.126	\$ 66,667	\$ 0.095	\$ 50,123	\$ 16,543	\$ 98,568
9	524,973	\$ 0.129	\$ 67,660	\$ 0.095	\$ 49,872	\$ 17,787	\$ 116,355
10	522,348	\$ 0.131	\$ 68,668	\$ 0.095	\$ 49,623	\$ 19,045	\$ 135,400
11	519,736	\$ 0.134	\$ 69,691	\$ 0.095	\$ 49,375	\$ 20,316	\$ 155,717
12	517,138	\$ 0.137	\$ 70,730	\$ 0.095	\$ 49,128	\$ 21,601	\$ 177,318
13	514,552	\$ 0.140	\$ 71,783	\$ 0.095	\$ 48,882	\$ 22,901	\$ 200,219
14	511,979	\$ 0.142	\$ 72,853	\$ 0.095	\$ 48,638	\$ 24,215	\$ 224,434
15	509,419	\$ 0.145	\$ 73,938	\$ 0.095	\$ 48,395	\$ 25,544	\$ 249,978

# Summary

- **Current Design: 460 kw over 2 schools.**
- **Expected production: 543,720 kwh/yr**
- **(88% of current annual usage)**
- **Year 1 savings: ~ \$8,156\***
- **Year 15 savings: ~ \$249,978\***

• *\*Includes \$450,000 of roofing expenses*

