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It is the mission of the Urbana Park District to:

- Improve the quality of life of its citizens through a responsive, efficient, and creative park and recreation system,
- Pursue excellence in a variety of programs, parks, and special facilities that contribute to the attractiveness of neighborhoods, conservation of the environment, and the overall health of the community.

**NOTICE AND AGENDA OF MEETING  
URBANA PARK DISTRICT BOARD OF COMMISSIONERS  
BOARD STUDY SESSION  
TUESDAY, APRIL 2, 2024  
7:00 PM  
PLANNING AND OPERATIONS FACILITY  
1011 E. KERR AVENUE  
URBANA, ILLINOIS 61802**

*Board Study Sessions are designed for the Board to study, review and discuss specific topics. Actions are not typically taken during a Study Session, unless specifically noted on the agenda.*

**I. Call to Order**

A. Remote Attendance

*The Board may authorize, by a voice vote of the physically present board members, any Commissioner wishing to attend remotely, pursuant to the UPD Remote Attendance Policy (Ord 2017-03).*

**II. Accept Agenda**

**III. Public Comment**

*Any member of the public may make a brief statement at this time within the public participation rules of the Board.*

**IV. Discussion**

- A. Delcomyn Park Updates
- B. Review of Updated Solar Options

**V. Comments from Commissioners**

**VI. Adjourn**

Meeting Agenda and its supporting materials are on the UPD website at <http://www.urbanaparks.org/documents/index.html>, choose the “Public Meetings” category and search for the meeting information you wish to download.

# Memo

**To:** Urbana Park District Board of Commissioners  
**From:** Derek Liebert, Superintendent of Planning and Operations  
**Copy:** Tim Bartlett, Executive Director  
Corky Emberson, Superintendent of Recreation  
Laura Orcutt, Finance Manager  
Andy Rousseau, Project Manager  
**Date:** April 2, 2024  
**Re:** Review of Updated Solar Options

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## **I. Statement of Situation**

The Urbana Park District has been working with Progressive Business Solutions on soliciting solar proposals and approved a 20-year Power Purchase Agreement with General Energy/DSD Renewables for the aggregated rate of \$0.06/kWh pending Urbana School District and joint park and school district legal agreement on the contract terms. This rate was based upon the Illinois Solar for All program and associated incentives.

## **II. Statement of work**

While legal has been working through the contract terms, DSD has been reviewing the Illinois Solar for All Program and has determined that while the park district would have qualified for the program in January, our fluctuating rate has dropped considerably since then and we no longer qualify. Progressive Business Solutions will attend the Study Session to review the implications of this on the PPA option as well as some additional options for the park district's consideration.



# **Urbana Park District**

## **Updated Solar Project Review**

### **March 27, 2024**

# Project Status

Urbana Park District signed the Term Sheet with DSD Renewables to complete the due diligence period and negotiate Power Purchase Agreement (PPA) terms with the both District's legal counsel. While negotiating the contract DSD also engaged Central Road (certified Illinois Shines Solar for All Vendor) to assess the billing periods and current invoices to ensure placement in the Illinois Solar for All Program (ILSFA).

Based on the Illinois Solar for All dynamics and Central Road's assessment, DSD Renewables is stating that the comparable cost is \$0.0980/kWh and having a PPA rate of \$0.0600/kWh would not meet the required savings reduction for the Illinois Solar for All Program. Central Road is not including the meter lease, distribution facility charge, and infrastructure fees in any of the comparison when submitting paperwork to the ILSFA administrators.

DSD Renewables assessed multiple options to see if there was anything that could be done with the financing of the project and the ability to get to the reduction needed for the ILSFA program is not achievable at this time.

Progressive has outlined options given this development for the Urbana Park District on the Health & Wellness Center and Planning & Operations Building going forward.

# Solar Options Going Forward

## **Option 1** - Traditional Adjustable Block Program

- Pricing is coming in at \$0.097/kWh for the 20-year contract
- Would still be able to use DSD Renewables and General Energy for this option. A few remaining PPA contract questions remain from the legal review.
- No additional lost time as interconnections have been applied for and all engineering + design is complete.
- Project savings is:
  - \$253,984 = Planning and Operations and \$304,807 = Health and Wellness

## **Option 2** – Third-Party Lease Program

- Partner with Constellation Energy on the Energy Made Easy program (District is currently with)
- Constellation would upfront the capital investment (\$1,474,469) to General Energy for construction + energization of the project and Urbana Park District + School District would pay back over 5 years.
- The payback would be included on the monthly energy bills as a line item. The first payment is due after the system comes live.
- Urbana Park District would own the system and advantage of the Federal ITC and State incentives that are available. (See next slides for breakdown)
- General Energy would be the contractor assigned to the project.
  - This allows for no lost time, engineering, interconnection, etc.
- Program would include a separate maintenance agreement with General Energy
  - Maintenance would mirror the responsibilities under a PPA agreement
  - Initial 5-year term (no annual escalator) then renew for 5-year terms at fair market value (analysis includes 3%)
- Urbana Park District receives ownership of the system and can use the monthly payment as a ledger balance on their monthly utility invoice.
- Under this program, the District is projected to save:
  - \$359,755 = Planning and Operations and \$428,008 = Health and Wellness

## **Option 3** – Purchase the System

- Urbana Park District would take advantage of the Federal ITC and State incentives that are available.
- Purchase rate is \$1,064,250
- Cash Flow Positive in year 5
- Would the District be able to fund this option given the high cost of capital in a Third-Party Lease Program?
- 20-year cash flow:
  - \$585,394 = Planning and Operations and \$697,773 = Health and Wellness

# Cash Flow Analysis for Power Purchase Agreement – Planning and Operations



Cash Flow Analysis for Power Purchase Agreement						Utility Rate per kWh with 2.0%	Electric Bill with 2%	Annual Cash Flow including 2.0% Increase
Contract Years	PPA Rate	PPA Payments	Electric Bill Savings	Solar Array Production	Total Annual Cash Flow			
1	\$0.09700	\$ (25,164)	\$ 30,612	259,425	\$ 5,448	\$ 0.118000	\$ 30,612	\$ 5,448
2	\$0.09700	\$ (25,038)	\$ 30,459	258,128	\$ 5,421	\$ 0.121249	\$ 31,298	\$ 6,259
3	\$0.09700	\$ (24,913)	\$ 30,307	256,837	\$ 5,394	\$ 0.124498	\$ 31,976	\$ 7,062
4	\$0.09700	\$ (24,789)	\$ 30,155	255,553	\$ 5,367	\$ 0.127746	\$ 32,646	\$ 7,857
5	\$0.09700	\$ (24,665)	\$ 30,004	254,275	\$ 5,340	\$ 0.130995	\$ 33,309	\$ 8,644
6	\$0.09700	\$ (24,541)	\$ 29,854	253,004	\$ 5,313	\$ 0.134244	\$ 33,964	\$ 9,423
7	\$0.09700	\$ (24,419)	\$ 29,705	251,739	\$ 5,287	\$ 0.137493	\$ 34,612	\$ 10,194
8	\$0.09700	\$ (24,297)	\$ 29,557	250,480	\$ 5,260	\$ 0.140741	\$ 35,253	\$ 10,956
9	\$0.09700	\$ (24,175)	\$ 29,409	249,228	\$ 5,234	\$ 0.143990	\$ 35,886	\$ 11,711
10	\$0.09700	\$ (24,054)	\$ 29,262	247,982	\$ 5,208	\$ 0.147239	\$ 36,513	\$ 12,458
11	\$0.09700	\$ (23,934)	\$ 29,116	246,742	\$ 5,182	\$ 0.150488	\$ 37,132	\$ 13,198
12	\$0.09700	\$ (23,814)	\$ 28,970	245,508	\$ 5,156	\$ 0.153736	\$ 37,743	\$ 13,929
13	\$0.09700	\$ (23,695)	\$ 28,825	244,280	\$ 5,130	\$ 0.156985	\$ 38,348	\$ 14,653
14	\$0.09700	\$ (23,577)	\$ 28,681	243,059	\$ 5,104	\$ 0.160234	\$ 38,946	\$ 15,370
15	\$0.09700	\$ (23,459)	\$ 28,538	241,844	\$ 5,079	\$ 0.163483	\$ 39,537	\$ 16,078
16	\$0.09700	\$ (23,342)	\$ 28,395	240,635	\$ 5,053	\$ 0.166731	\$ 40,121	\$ 16,780
17	\$0.09700	\$ (23,196)	\$ 28,217	239,131	\$ 5,022	\$ 0.169980	\$ 40,647	\$ 17,452
18	\$0.09700	\$ (23,109)	\$ 28,112	238,234	\$ 5,003	\$ 0.173229	\$ 41,269	\$ 18,160
19	\$0.09700	\$ (22,993)	\$ 27,971	237,043	\$ 4,978	\$ 0.176478	\$ 41,833	\$ 18,840
20	\$0.09700	\$ (22,878)	\$ 27,831	235,858	\$ 4,953	\$ 0.179726	\$ 42,390	\$ 19,512
<b>Totals</b>		<b>\$ (480,052)</b>	<b>\$ 583,980</b>	<b>4,948,985</b>	<b>\$ 103,929</b>		<b>\$ 734,036</b>	<b>\$ 253,984</b>

Inputs and Assumption	
Avoided Utility Cost:	\$0.118/kWh avg.
PPA Escalator:	0%
Year 1 Energy Savings:	\$20,321
kW-DC:	225 KW DC
1st Year Annual Production:	259,425 kWh
Utility Increase:	2.5%
Solar Degradation:	0.50%

Final Engineering and Design has been completed and interconnection has been submitted through Ameren with General Energy.

# Cash Flow Analysis for Power Purchase Agreement – Health and Wellness



Contract Years	PPA Rate	PPA Payments	Electric Bill Savings	Solar Array Production	Total Annual Cash Flow	Utility Rate per kWh with 2.0%	Electric Bill with 2%	Annual Cash Flow including 2.0% Increase
1	\$0.09700	\$ (30,197)	\$ 36,735	311,310	\$ 6,538	\$ 0.118000	\$ 36,735	\$ 6,538
2	\$0.09700	\$ (30,046)	\$ 36,551	309,753	\$ 6,505	\$ 0.121249	\$ 37,557	\$ 7,511
3	\$0.09700	\$ (29,896)	\$ 36,368	308,205	\$ 6,472	\$ 0.124498	\$ 38,371	\$ 8,475
4	\$0.09700	\$ (29,746)	\$ 36,186	306,664	\$ 6,440	\$ 0.127746	\$ 39,175	\$ 9,429
5	\$0.09700	\$ (29,598)	\$ 36,005	305,130	\$ 6,408	\$ 0.130995	\$ 39,971	\$ 10,373
6	\$0.09700	\$ (29,450)	\$ 35,825	303,605	\$ 6,376	\$ 0.134244	\$ 40,757	\$ 11,307
7	\$0.09700	\$ (29,302)	\$ 35,646	302,087	\$ 6,344	\$ 0.137493	\$ 41,535	\$ 12,232
8	\$0.09700	\$ (29,156)	\$ 35,468	300,576	\$ 6,312	\$ 0.140741	\$ 42,303	\$ 13,148
9	\$0.09700	\$ (29,010)	\$ 35,291	299,073	\$ 6,281	\$ 0.143990	\$ 43,064	\$ 14,053
10	\$0.09700	\$ (28,865)	\$ 35,114	297,578	\$ 6,249	\$ 0.147239	\$ 43,815	\$ 14,950
11	\$0.09700	\$ (28,721)	\$ 34,939	296,090	\$ 6,218	\$ 0.150488	\$ 44,558	\$ 15,837
12	\$0.09700	\$ (28,577)	\$ 34,764	294,610	\$ 6,187	\$ 0.153736	\$ 45,292	\$ 16,715
13	\$0.09700	\$ (28,434)	\$ 34,590	293,137	\$ 6,156	\$ 0.156985	\$ 46,018	\$ 17,584
14	\$0.09700	\$ (28,292)	\$ 34,417	291,671	\$ 6,125	\$ 0.160234	\$ 46,736	\$ 18,443
15	\$0.09700	\$ (28,151)	\$ 34,245	290,213	\$ 6,094	\$ 0.163483	\$ 47,445	\$ 19,294
16	\$0.09700	\$ (28,010)	\$ 34,074	288,761	\$ 6,064	\$ 0.166731	\$ 48,145	\$ 20,136
17	\$0.09700	\$ (27,870)	\$ 33,904	287,318	\$ 6,034	\$ 0.169980	\$ 48,838	\$ 20,968
18	\$0.09700	\$ (27,730)	\$ 33,734	285,881	\$ 6,004	\$ 0.173229	\$ 49,523	\$ 21,792
19	\$0.09700	\$ (27,592)	\$ 33,565	284,452	\$ 5,973	\$ 0.176478	\$ 50,199	\$ 22,608
20	\$0.09700	\$ (27,454)	\$ 33,397	283,029	\$ 5,944	\$ 0.179726	\$ 50,868	\$ 23,414
<b>Totals</b>		<b>\$ (576,097)</b>	<b>\$ 700,819</b>	<b>5,939,143</b>	<b>\$ 124,722</b>		<b>\$ 880,904</b>	<b>\$ 304,807</b>

Inputs and Assumption	
Avoided Utility Cost:	\$0.118/kWh avg.
PPA Escalator:	0%
Year 1 Energy Savings:	\$20,321
kW-DC:	270 KW DC
1st Year Annual Production:	311,310 kWh
Utility Increase:	2.5%
Solar Degradation:	0.50%

Final Engineering and Design has been completed and interconnection has been submitted through Ameren with General Energy.

# Constellation Energy Made Easy Program – Planning and Operations



## Planning and Operations

### Project Economics Summary

Years	Annual Project Cost	Annual Maintenance Contract	Inverter Rebate	Annual Electricity Cost Savings	Annual Illinois SREC Incentives	Federal Investment Tax Credit	Annual Cash Flow	Cumulative Cash Flow
1	(\$134,043)	(\$2,275)	\$56,250	\$31,079	\$27,809	\$201,064	\$179,884	\$179,884
2	(\$134,043)	(\$2,275)		\$31,542	\$27,809	-	(\$76,967)	\$102,918
3	(\$134,043)	(\$2,275)		\$32,012	\$27,809	-	(\$76,497)	\$26,421
4	(\$134,043)	(\$2,275)		\$32,489	\$27,809	-	(\$76,020)	(\$49,599)
5	(\$134,043)	(\$2,275)		\$32,973	\$27,809	-	(\$75,536)	(\$125,135)
6	-	(\$2,343)		\$33,465	\$27,809	-	\$58,931	(\$66,204)
7	-	(\$2,343)		\$33,963	\$27,809	-	\$59,429	(\$6,775)
8	-	(\$2,343)		\$34,469		-	\$32,126	\$25,351
9	-	(\$2,343)		\$34,983		-	\$32,640	\$57,991
10	-	(\$2,343)		\$35,504		-	\$33,161	\$91,152
11	-	(\$2,413)		\$36,033		-	\$33,620	\$124,772
12	-	(\$2,413)		\$36,570		-	\$34,157	\$158,929
13	-	(\$2,413)		\$37,115		-	\$34,702	\$193,631
14	-	(\$2,413)		\$37,668		-	\$35,255	\$228,886
15	-	(\$2,413)		\$38,229	\$2,781	-	\$38,597	\$267,483
16	-	(\$2,485)		\$38,799		-	\$36,314	\$303,797
17	-	(\$2,485)		\$39,327		-	\$36,842	\$340,639
18	-	(\$2,485)		\$39,963		-	\$37,478	\$378,117
19	-	(\$2,485)		\$40,559		-	\$38,074	\$416,191
20	-	(\$2,485)		\$41,163		-	\$38,678	\$454,869
<b>Total</b>	<b>(\$670,213)</b>		<b>\$56,250</b>	<b>\$717,905</b>	<b>\$197,443</b>	<b>\$201,064</b>	<b>\$454,869</b>	



# Constellation Energy Made Easy Program – Health and Wellness



## Health and Wellness

### Project Economics Summary

Years	Annual Project Cost	Annual Maintenance Contract	Inverter Rebate	Annual Electricity Cost Savings	Annual Illinois SREC Incentives	Federal Investment Tax Credit	Annual Cash Flow	Cumulative Cash Flow
1	(\$160,851)	(\$2,540)	\$67,500	\$37,295	\$32,141	\$241,277	\$214,822	\$214,822
2	(\$160,851)	(\$2,540)		\$37,851	\$32,141	-	(\$93,399)	\$121,423
3	(\$160,851)	(\$2,540)		\$38,415	\$32,141	-	(\$92,835)	\$28,588
4	(\$160,851)	(\$2,540)		\$38,987	\$32,141	-	(\$92,263)	(\$63,675)
5	(\$160,851)	(\$2,540)		\$39,568	\$32,141	-	(\$91,682)	(\$155,358)
6	-	(\$2,616)		\$40,157	\$32,141	-	\$69,682	(\$85,675)
7	-	(\$2,616)		\$40,756	\$32,141	-	\$70,281	(\$15,394)
8	-	(\$2,616)		\$41,363		-	\$38,747	\$23,353
9	-	(\$2,616)		\$41,979		-	\$39,363	\$62,716
10	-	(\$2,616)		\$42,605		-	\$39,989	\$102,705
11	-	(\$2,694)		\$43,240		-	\$40,546	\$143,251
12	-	(\$2,694)		\$43,884		-	\$41,190	\$184,441
13	-	(\$2,694)		\$44,538		-	\$41,844	\$226,285
14	-	(\$2,694)		\$45,201		-	\$42,507	\$268,792
15	-	(\$2,694)		\$45,875	\$3,214	-	\$46,395	\$315,187
16	-	(\$2,775)		\$46,558		-	\$43,783	\$358,970
17	-	(\$2,775)		\$47,252		-	\$44,477	\$403,447
18	-	(\$2,775)		\$47,956		-	\$45,181	\$448,628
19	-	(\$2,775)		\$48,671		-	\$45,896	\$494,524
20	-	(\$2,775)		\$49,396		-	\$46,621	\$541,145
<b>Total</b>	<b>(\$804,256)</b>		<b>\$67,500</b>	<b>\$861,547</b>	<b>\$228,202</b>	<b>\$241,277</b>	<b>\$541,145</b>	

# Purchase – Planning & Operations

Years	Annual Project Cost	Annual Electricity Cost Savings	Annual Maintenance Contract	Annual Illinois SREC Incentives	Smart Inverter Rebate	Federal Investment Tax Credit	Total Incentives, Rebates, and Credits	Annual Cash Flow	Cumulative Cash Flow
1	\$ (483,750.00)	\$ 31,079	\$ (2,275)	\$ 27,809	\$ 56,250	\$ 145,125	\$ 229,184	\$ (225,762)	\$ (225,762)
2		\$ 31,542	\$ (2,275)	\$ 27,809	-	-	\$ 27,809	\$ 57,076	\$ (168,686)
3		\$ 32,012	\$ (2,275)	\$ 27,809	-	-	\$ 27,809	\$ 57,546	\$ (111,140)
4		\$ 32,489	\$ (2,275)	\$ 27,809	-	-	\$ 27,809	\$ 58,023	\$ (53,117)
5		\$ 32,973	\$ (2,275)	\$ 27,809	-	-	\$ 27,809	\$ 58,507	\$ 5,390
6		\$ 33,465	\$ (2,343)	\$ 27,809	-	-	\$ 27,809	\$ 58,930	\$ 64,321
7		\$ 33,963	\$ (2,343)	\$ 27,809	-	-	\$ 27,809	\$ 59,429	\$ 123,750
8		\$ 34,469	\$ (2,343)		-	-	\$ -	\$ 32,126	\$ 155,876
9		\$ 34,983	\$ (2,343)		-	-	\$ -	\$ 32,640	\$ 188,516
10		\$ 35,504	\$ (2,343)		-	-	\$ -	\$ 33,161	\$ 221,677
11		\$ 36,033	\$ (2,413)		-	-	\$ -	\$ 33,620	\$ 255,297
12		\$ 36,570	\$ (2,413)		-	-	\$ -	\$ 34,157	\$ 289,454
13		\$ 37,115	\$ (2,413)		-	-	\$ -	\$ 34,702	\$ 324,156
14		\$ 37,668	\$ (2,413)		-	-	\$ -	\$ 35,255	\$ 359,410
15		\$ 38,229	\$ (2,413)	\$ 2,781	-	-	\$ 2,781	\$ 38,597	\$ 398,007
16		\$ 38,799	\$ (2,485)		-	-	\$ -	\$ 36,314	\$ 434,321
17		\$ 39,327	\$ (2,485)		-	-	\$ -	\$ 36,842	\$ 471,164
18		\$ 39,963	\$ (2,485)		-	-	\$ -	\$ 37,478	\$ 508,642
19		\$ 40,559	\$ (2,485)		-	-	\$ -	\$ 38,074	\$ 546,716
20		\$ 41,163	\$ (2,485)		-	-	\$ -	\$ 38,678	\$ 585,395
<b>Total</b>	<b>\$ (483,750.00)</b>	<b>\$ 717,906.52</b>		<b>\$ 197,443</b>	<b>\$ 56,250</b>	<b>\$ 145,125</b>	<b>\$ 398,818</b>	<b>\$ 585,394.52</b>	

Electric Savings assumes a 2% increase per year for the 20 year term

# Purchase – Health & Wellness

Years	Annual Project Cost	Annual Electricity Cost Savings	Annual Maintenance Contract	Annual Illinois SREC Incentives	Smart Inverter Rebate	Federal Investment Tax Credit	Total Incentives, Rebates, and Credits	Annual Cash Flow	Cumulative Cash Flow
1	\$ (580,500.00)	\$ 37,295	\$ (2,540)	\$ 32,141	\$ 67,500	\$ 174,150	\$ 273,791	\$ (271,954)	\$ (271,954)
2		\$ 37,851	\$ (2,540)	\$ 32,141	-	-	\$ 32,141	\$ 67,452	\$ (204,502)
3		\$ 38,415	\$ (2,540)	\$ 32,141	-	-	\$ 32,141	\$ 68,016	\$ (136,487)
4		\$ 38,987	\$ (2,540)	\$ 32,141	-	-	\$ 32,141	\$ 68,588	\$ (67,899)
5		\$ 39,568	\$ (2,540)	\$ 32,141	-	-	\$ 32,141	\$ 69,169	\$ 1,270
6		\$ 40,157	\$ (2,616)	\$ 32,141	-	-	\$ 32,141	\$ 69,682	\$ 70,953
7		\$ 40,756	\$ (2,616)	\$ 32,141	-	-	\$ 32,141	\$ 70,281	\$ 141,233
8		\$ 41,363	\$ (2,616)		-	-	\$ -	\$ 38,747	\$ 179,980
9		\$ 41,979	\$ (2,616)		-	-	\$ -	\$ 39,363	\$ 219,344
10		\$ 42,605	\$ (2,616)		-	-	\$ -	\$ 39,989	\$ 259,333
11		\$ 43,240	\$ (2,694)		-	-	\$ -	\$ 40,546	\$ 299,878
12		\$ 43,884	\$ (2,694)		-	-	\$ -	\$ 41,190	\$ 341,068
13		\$ 44,538	\$ (2,694)		-	-	\$ -	\$ 41,844	\$ 382,912
14		\$ 45,201	\$ (2,694)		-	-	\$ -	\$ 42,507	\$ 425,420
15		\$ 45,875	\$ (2,694)	\$ 3,214	-	-	\$ 3,214	\$ 46,395	\$ 471,815
16		\$ 46,558	\$ (2,775)		-	-	\$ -	\$ 43,783	\$ 515,598
17		\$ 47,252	\$ (2,775)		-	-	\$ -	\$ 44,477	\$ 560,075
18		\$ 47,956	\$ (2,775)		-	-	\$ -	\$ 45,181	\$ 605,256
19		\$ 48,671	\$ (2,775)		-	-	\$ -	\$ 45,896	\$ 651,152
20		\$ 49,396	\$ (2,775)		-	-	\$ -	\$ 46,621	\$ 697,773
<b>Total</b>	<b>\$ (580,500.00)</b>	<b>\$ 861,547.18</b>		<b>\$ 228,201</b>	<b>\$ 67,500</b>	<b>\$ 174,150</b>	<b>\$ 469,851</b>	<b>\$ 697,773.18</b>	

Electric Savings assumes a 2% increase per year for the 20 year term

# Recommendation/Next Steps

Present to the Urbana Park District Working Group on April 2, 2024.

Access options to move forward and finalize direction

Urbana Park District same contract approval provisions with Executive Director signature once legal agreement has been approved by legal.

Present final legal approved contracts to finalize contract

Establish EPA Green Power Partner designation once system is energized