

Audit of Solar Power Purchase Agreements December 22, 2020

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SECTION I BACKGROUND AND EXECUTIVE SUMMARY

Background

In 2013 and again in 2014, Onondaga County (County) began to pursue solar power solutions using a request for proposals (RFP) process. At the conclusion of the RFP process, the County executed Commercial Purchase and Performance Guarantee agreements (Contracts) with SolarCity Corporation (SolarCity), a company which sells large-scale solar power solutions. The County is currently contracted with Solar City and purchasing solar energy at three sites—Oak Orchard Lagoons, Oak Orchard Waste Water Treatment Plant and Jamesville Correctional Facility.

The Contracts with SolarCity included the construction of arrays of solar energy collecting panels to be built at the three sites. While the County retains ownership of the land at the sites, Solar City owns and maintains the panels. Each site has a 20-year contract and upon conclusion, the County has the option to purchase the solar panel systems from SolarCity. In addition, the Contracts define the terms for the location of the panels, set-up requirements for the panels (tilt, azimuth, etc.), price per kilowatt hour (kWh) per year, expected first year and every five year production as well as having a SolarGuard readable meter at each site. The County pays SolarCity a set fee per kWh for the use of the panels (with a 2% annual accelerator increase) and the County receives credits per kWh from National Grid for the energy collected by the panels. The National Grid rate per kWh is market driven so the County is effectively counterbalancing energy costs against the market during the term of the Contracts.

The kWh produced by the solar arrays are not immediately used by the County, rather the kWh are intertwined with National Grid's local utility grid. Per a Superintendent with County's Water Environment Protection Department, structuring the energy flow in this way prevents down time for the facilities near the sites in the event of an issue with the solar panels and/or if the panels were shut off temporarily.

Executive Summary

The audit revealed the following:

- Numerous components of the RFP process were not available for review such as the
 information related to the process and criteria used to determine the award of the contract,
 the Department Evaluation Summary Form, and an Evaluation Memo to be directed to the
 RFP Evaluation Committee.
- We were not provided the information for the two additional sites quoted.

- The Oak Orchard Lagoons site was not included in the list of potential locations in the original RFP. However, SolarCity quoted this location in their proposal and the County ended up contracting with them to build and manage solar panels at this location. No other parties responding to the RFP included the Oak Orchard Lagoons site in their proposal. The RFP did allow for the County and the selected vendor to mutually select a more favorable or an additional site but only after a contract had been awarded.
- For the Jamesville site, the price per kWh for Year 1 stated in the Power Purchase Agreement ended up being lower than the figure stated in SolarCity's response to the RFP. This resulted in an added financial benefit to the County of more than \$38,700.
- Based on current production, Oak Orchard WWTP and Jamesville Correctional are estimated to fall short of the first 60 months guaranteed kWh produced outlined in the Contracts. If future production remains consistent with current energy produced, SolarCity could owe the County over \$348,000. Oak Orchard Lagoons recently surpassed the 60-month mark in June 2020 and similarly under produced resulting in the calculation of SolarCity owing the County \$10,258.
- The Jamesville Correctional Facility solar panel system was not installed to the specifications of the RFP (Exhibit B) and Power Purchase Agreement (Exhibit B) in regard to the tilt and azimuth of the panels.
- At the Jamesville site, there is substantial plant growth from underneath and between the panels and this may negatively affect their performance. The overgrowth could also affect the long-term life of the panels. This is important because the County has the option to purchase the panels from Solar City at the end of the contracts.
- None of the sites met the first year projections for expected first year energy production, as stated in the SolarCity's Power Purchase Agreements.
- All three of the sites at some point had different kWh invoiced by SolarCity as compared to the kWh produced per SolarCity's website information.
- We were unable to locate the SolarGuard Gateway monitoring hardware that was to be located at each site. This creates a challenge of accessing the SolarGuard Gateway hardware when the monitor is offline and SolarCity needs to work with the County troubleshooting an issue. (Exhibit A).

Recommendations:

- 1) County administration should review the current RFP Directive dated 3/9/2010 and ensure departmental adherence to the standards. Recommendations should be made to the Division of Purchase for necessary improvements to the process and established controls to ensure departments adherence. Updated elements should include:
 - A description of the notification requirements for potential vendors.
 - Clear process and criteria for the award of the contract in the RFP so all vendors are aware of the process and criteria when preparing their proposals.
 - A statement in the RFP indicating vendors will be held to their proposals. Should changes to the contract be necessary, there should be provision for the County to address the changes using a predetermined process and/or to opt out of the contract.
 - A clear description of the documentation and availability requirements for the entire RFP process. This documentation is generally called a procurement record and includes all documents in the RFP process starting with the development of the RFP through the award and contract documents.
 - A description of the penalty/implication for departments not adhering to the RFP process.
- 2) The Division of Purchase, upon review of the recommendations made by County administration, should update the County's RFP Directive, which appears to have been last updated March 2010.
- 3) The Division of Purchase should design an RFP checklist outlining the steps to be followed. The checklist should be completed during or at the end of the RFP process and should require the sign-off by the RFP committee. It should be accompanied by the Committee's RFP Evaluation Summary Form/Memo.
- 4) An employee in the Purchasing Division should be assigned to oversee every RFP and be required to review and sign off on each RFP's completed RFP Checklist and RFP Evaluation Summary Form/Memo.
- 5) Once County administration releases the updated RFP process and documentation requirements, training should be provided to all appropriate County employees involved in the RFP process.
- 6) County administration should review the Contract for Jamesville Correctional Facility to explore the possibility of whether or not maintenance can be done to rectify the misaligned panels to optimize the solar arrays performance at no cost to the County. Once the review is complete, an estimate should be obtained for the regular trimming of grass and removal

- of plants from the panels. Similar maintenance estimates should be obtained for both Oak Orchard sites.
- 7) County administration should revisit with SolarCity the contractual provision of having SolarGuard Gateway Monitor hardware onsite and accessible.
- 8) It is recommended the County more closely oversee the initiative for site issues, contractual adherence, site production vs. performance guarantees, and/or reviewing and reconciling invoices from the two project partners.

SECTION II SCOPE AND METHODOLOGY

Scope and Objectives

The scope of this audit was the County Contracts for the production and use of solar power with SolarCity, from procurement to monitoring. The objectives for this audit were to determine if:

- All requirements of the County RFP procurement process were followed to acquire these contracts.
- The County is effectively monitoring the SolarCity Contracts.
- The County is receiving the full benefits provided for in the SolarCity contracts.

Methodology

In order to complete the objectives we:

- 1) Reviewed the RFP Administrative Directive dated March 9, 2010.
- 2) Reviewed RFP manager training manual dated March 2010 for determining the County RFP requirements.
- 3) Inquired of the Purchasing Department for applicable procedures and documentation of the RFP process.
- 4) Inquired of National Grid and County employees for applicable utility accounts related to the SolarCity contracts and the calculation of the solar power credits.
- 5) Reviewed applicable National Grid and SolarCity utility bills.
- 6) Reviewed the SolarCity website to verify invoiced kWh compared to actual kWh.
- 7) Reviewed all applicable County expenses for 2018 recorded in the County accounting system (PeopleSoft).
- 8) Compared usage and billing for SolarCity and National Grid to the contracts.
- 9) Conducted site visits to the solar panel system locations.

SECTION III FINDINGS AND RECOMMENDATIONS

The pursuit of solar energy initiatives in Onondaga County was based on a combination of factors. One factor was likely the enhanced 2008 "net metering" law in New York State that allows for commercial customers in New York, including municipalities, with qualified renewable energy systems to sell excess electricity back to the local utility company. Possible additional factors were a series of renewable energy incentives offered by New York Governor Andrew Cuomo.

In 2012, Governor Andrew Cuomo announced during his State of the State address, a comprehensive energy strategy called "Reforming the Energy Vision". The strategy included a program called NY-Sun, to be run by the New York State Energy Research and Development Authority (NYSERDA). In the months following the address NY-Sun began to issue Program Opportunity Notices (PONs) for municipalities and governments to take on solar energy related projects. In 2013, NYSERDA announced PON 2589, a \$106.9 million funding incentive for solar energy system projects. In 2014, NYSERDA announced PON 2956, a \$60 million funding incentive for solar energy system projects.

Onondaga County decided to participate in PON 2589 and 2956 with the initiative falling under the umbrella of the Facilities Department. With funding from PON 2589 and 2956, the County created two competitive bid processes to attract vendors to build and manage multiple solar energy collection sites. The RFPs were issued and managed by the Division of Purchase. At the conclusion of the RFP processes, the County executed Commercial Purchase and Performance Guarantee agreements (Contracts) with SolarCity Corporation (SolarCity), a California-based company that provides large-scale solar solutions to commercial customers including municipalities and governments.

Currently the County is contracted with SolarCity and purchasing solar energy from them at three locations:

- Oak Orchard Lagoons
 - o Clay, NY
 - o 1,166 solar panels
 - o Went online in July 2015
- Oak Orchard Waste Water Treatment Plant (WWTP)
 - o Clay, NY
 - o 8,272 solar panels
 - o Went online in January 2018

- Jamesville Correctional Facility
 - o Jamesville, NY
 - o 8,094 panels
 - o Went online in April 2018

The Director of the Office of the Environment (OE) is currently responsible for the solar energy initiative (previously it had been the Director of Energy and Sustainability in the Facilities Department). The Director of OE described the rationale for the County's entry into the solar energy arena as multifaceted. It was intended to create opportunities to obtain clean energy from sustainable sources, to drive down energy costs, to reduce the County's carbon footprint and to create an opportunity to "hedge" energy pricing—or lock in at pre-set (and thereby predictable) rates.

The Contracts with SolarCity included the construction of arrays of solar energy collecting panels to be built at the three sites. While the County retains ownership of the land at the sites, Solar City owns and maintains the panels. Each site has a 20-year contract and upon conclusion, the County has the option to purchase the solar panel systems from SolarCity. In addition, the Contracts define the terms for the location of the panels, set-up requirements for the panels (tilt, azimuth, etc.), price per kilowatt hour (kWh) per year, expected first year and every five year production as well as having a SolarGuard readable meter at each site. The County pays SolarCity a set fee per kWh for the use of the panels (with a 2% annual accelerator increase) and the County receives credits per kWh from National Grid for the energy collected by the panels. The National Grid rate per kWh is market driven so the County currently is effectively counterbalancing energy costs against the market during the term of the Contracts.

The kWh produced by the solar arrays are not immediately used by the County. Instead, they are intertwined with National Grid's local utility grid. Per a Superintendent with County's Water Environment Protection Department, structuring the energy flow in this way prevents down time for the facilities near the sites in the event of an issue with the solar panels and/or if the panels were shut off temporarily.

Procurement of Solar Power Contracts:

Onondaga County has specific procedures for obtaining professional service contracts using a request for proposal (RFP) process. For a project with costs of \$50,000 and above, procedures for the RFP process include, but are not limited to:

- An RFP committee must be formed
- Descriptions of the RFP process and evaluation criteria must be documented
- A minimum of three quotes must be obtained
- Results and rationale for the award of the contract must be documented in the form of an Evaluation Summary Form or Memo

Additionally, if the lowest proposal is not accepted by the County Division of Purchase, the reason(s) must be documented and the process must be reviewed by the RFP Committee.

The Director of Purchasing we initially worked with when the audit began left the position on October 25, 2019. This Director initially had informed us that everything related to the procurement of these contracts was in the County's Lotus Notes purchasing database. After reviewing the database and not finding many standard RFP-related materials, we twice requested and were provided additional information that was not in the database. These materials included the actual RFPs (including detailed spreadsheets of site-specific energy usage and the National Grid account numbers) and responses to the RFPs from vendors.

We requested but did not receive a list of potential vendors the RFP was sent to, the evaluation criteria, an RFP process description of the results to determine the awarding of the Contract, a Department Evaluation Summary Form, and an Evaluation Memo. Per the County RFP requirements, when making the recommendation for a RFP contract award over \$50,000, a Department Evaluation Summary Form and an Evaluation Memo addressed to the RFP Evaluation Committee must be prepared.

With having both the person who oversaw the RFP process (Director of Purchase) and the person who initially oversaw the initiative (former Director of Energy and Sustainability in the Facilities Department) no longer available to us for the majority of the audit timeframe, it was arduous to get answers on questions related to the development, execution and the awarding of these solar power contracts.

The initial RFP document (# 13-5100-003) received from the Division of Purchase for solar power included five locations:

- Metro Water Board
- Meadowbrook Waste Water Treatment Plant (WWTP)
- Oak Orchard WWTP *
- o Brewerton WWTP
- o Baldwinsville Sewage Treatment Plant

The subsequent RFP document (#14-5100-002) received from the Division of Purchase for solar power included seven locations:

- Metro WWTP
- Meadowbrook WWTP
- o Clear Water WWTP
- o Eastern Manlius Water
- Jamesville Correctional Facility *
- Hillbrook Detention Center
- Western Reservoir

The County is currently contracted and purchasing solar energy from SolarCity at three locations:

- Oak Orchard Lagoons */**
- Oak Orchard WWTP
- o Jamesville Correctional Facility

* a site currently under contract

** a site but not included in either RFP

RFP Issues:

The audit found a number of deficiencies in the RFP process specific to this procurement. These include:

- **A.** Oak Orchard Lagoons was not included in either the original or the subsequent RFP. SolarCity was the only vendor to include the Oak Orchard Lagoons site in their quote. The County subsequently executed contracts with SolarCity to establish solar panel systems for three locations--including Oak Orchard Lagoons.
- **B.** We were not provided with the information to support the energy usage and account information in regards to the two additional sites quoted in RFP # 13-5100-003 issued in 2013. The information to support the energy usage and account information for the Jamesville Correctional site was included in RFP #14-5100-002 issued in 2014. Therefore, we question how SolarCity and O'Connell Electric were the only vendors to provide quotes for these sites based on the information provided to us. Exhibit D is a summary of the vendors, sites requested and the quotes provided for RFP #13-5100-003.
- **C.** The RFP allowed for the County and the selected vendor to mutually select a more favorable or an additional site but only after a contract had been awarded. Per Exhibit D, the RFP proposals received were all dated around June 28, 2013. We noted the award letter to SolarCity from the County was dated August 9, 2013.
 - In addition, in order for any vendor to submit a potentially acceptable bid, they would need to determine the size of the panel system needed for a site. Certain baseline information is needed to do that, including a National Grid account number and information from the previous year of billing/usage for that account (Exhibit C). In the bid for the Oak Orchard site(s), Solar City referenced one National Grid account relating to the Oak Orchard WWTP only on their pricing page, yet on a page of the RFP proposal SolarCity lists two different arrays for Oak Orchard. Other vendors only provided a quote for one National Grid account.
- **D.** The Division of Purchase was unable to provide us with the documented evaluation process and criteria or the results that culminated in the award of the solar power contracts to Solar City. In addition, they were unable to provide us with a list of vendors that each of the two RFPs were sent to.

- **E.** Due to the monetary amount of the contracts (over \$50,000), an RFP Department Evaluation Summary Form and an Evaluation Memo were required for both RFPs but were not provided to us.
- **F.** The original Contract for Jamesville Correctional was signed on January 13, 2015 by the previous County Executive. There was an amended contract signed on September 9, 2016, outlining a different system size, expected first year energy production, equipment, and increased price per kWh to be charged over the 20 years of the contract. We found no supporting documentation as to why the County would agree to an increased price.

Recommendations:

- 1) County administration should review the current RFP procedures and departmental adherence to the process. Recommendations should be made to the Division of Purchase for necessary improvements. Updated elements should include:
 - A description of the notification requirements for potential vendors.
 - Clear process and criteria for the award of the contract in the RFP so all vendors are aware of the process and criteria when preparing their proposals.
 - A statement in the RFP that vendors will be held to their proposals. Should changes to the contract be necessary, there should be provisions for the County to address the changes using a predetermined process and/or to opt out of the contract.
 - A clear description of the documentation and availability requirements for the entire RFP process. This documentation is generally called a procurement record and includes all documents in the RFP process starting with the development of the RFP through the award and contract documents.
 - A description of the penalty/implication for departments not adhering to the RFP process.
- 2) The Division of Purchase, upon review of the recommendations made by County administration, should update the County's RFP Directive- which appears to have been last updated March 2010.
- 3) The Division of Purchase should design a RFP checklist outlining the steps to be followed. The checklist should be completed at the end of or during the RFP process and should require the sign-off by the RFP committee. It should be accompanied by the Committee's RFP Evaluation Summary Form/Memo.
- 4) An employee in the Purchasing Division should be assigned to oversee every RFP and be required to review and sign-off on each RFP's completed RFP Checklist and RFP Evaluation Summary Form/Memo. The final sign off should be completed by the Director of Purchase.

- 5) Once County administration releases the updated RFP process and documentation requirements, training should be provided to all appropriate County employees involved in the RFP process.
- G. The County's quoted possible starting price/kWh depended on what incentive the Seller may get from NYSERDA as an incentive per/kWh. When using this means, the Oak Orchard locations starting price in the Power Purchase Agreements of per kWh to the County of \$0.060/kWh was correctly paired up with the correlating NYSERDA incentive per kWh of \$0.24/kWh to SolarCity, as originally quoted in the RFP from SolarCity. However, the Jamesville Correctional location price per kWh to the County did not pair with the correct incentive per kWh to SolarCity from the RFP to the Power Purchase Agreement. It appears the County received an added benefit as the starting price per kWh to the County from SolarCity stated in the Power Purchase Agreement was lower than the paired kWh starting point price per kWh to the County stated in the RFP with the correlating incentive kWh to SolarCity of \$.16/kWh. When analyzing this to the expected kWh to be produced in the first year per the Power Purchase Agreement, the County seemed to receive an added benefit of over \$38,700. It is unclear why the County received this extra benefit.

	with S	<u> </u>		
	Expected kWh to be Produced in First Year per Contracts	for SolarCi with N	kWh to County ity Incentive Price YSERDA of 16/kWh	 Totals
Proposal	3,026,881	\$	0.0740	\$ 223,989
Amended Contract	3,026,881	\$	0.0612	\$ 185,245

Recommendations:

We have no recommendations on the issue.

Site Issues:

The first three pictures below depict properly installed ground mounted solar panels. The panels appear to be set at the same angle and have smooth-flowing rows regardless of the terrain variances. They also have the tightest possible outlay to give optimal power output for the array's given space. Each SolarCity RFP and Power Purchase Agreement states the angle at which the solar panels shall be set at for optimal output for each fixed axis (tilt and azimuth) by a bird's eye view of the location with the expected solar panels to be installed. The solar panels must be free of debris and vegetation for optimal output.







Construction:

- H. The seven pictures below—taken on-site in September 2019 and again in September of 2020—depict the solar panels installed at Jamesville Correctional Facility. The site was the third and last of the sites to be built and go online. The wavy pattern of the rows is evident in the majority of the solar field at this location. It appears SolarCity did not install the panels at the same tilt (20°) and azimuth (180°) specifications stated in the RPF (Exhibit B) and the Power Purchase Agreement (Exhibit B). Solar City's RFP response states in an area titled "Design" that SolarCity exercises a stringent series of review processes in order for their designs to pass from the hands of their Design and Engineering teams to their installation crews out in the field. It also states "In general, ground mount systems shall meet these design criteria:
 - o Symmetrical and flat, despite undulations in the ground surface
 - Avoid direct shading on the PV modules from 9am 5pm, especially during the summer months
 - Inverters are placed in locations with good ventilation and shielded from exposure to rain
 - o Straight wire runs that are aligned with module frames and racking system

Note: Audit inquired but it was never brought to our attention who was overseeing the construction of this site.

Maintenance and Future Concerns:

I. The immense growth of vegetation underneath and between panels is high enough to cover a portion of almost every lower solar panel (per the September 2019 pictures). In September 2020, growth around the panels appeared to be trimmed, yet there was still substantial growth under and between the panels causing foliage to develop on top of the panels. These factors hinder energy production rates and can lessen the long-term life of the panels.

Internal audit completed online research with regards to shading and how it causes the solar panel systems to age more rapidly than originally expected. Below is information directly from the website of the manufacturer of the panels the County has installed at each site. Due to the following pictures taken at the Jamesville Correctional solar array site, we can reasonably believe the permanent shading of these panels could affect the module service lifetime because of accelerated ageing of the encapsulation material and thermal stress on the bypass diodes. This accelerated ageing could be detrimental to the County if they exercise the purchase clause at the end of the 20-year lease, especially when these elements are unknown to the future member(s) of the County that will have the opportunity to exercise the purchase option at the end of the Power Purchase Agreement.

There are manufacturer and industry standards that are accepted as best practice for the installation and maintenance of arrays of solar panels. Below is information from the Canadian manufacturer of the panels installed at all three arrays:

- Optimum Orientation/Tilt For maximum yield, the highest yields are achieved when sunlight shines perpendicularly onto the PV modules.
- <u>Shading</u> Even minor partial shading reduces yields. A module is considered to be unshaded if its entire surface is free from shading all year round. Sunlight should be able to reach the module even on the shortest day of the year. Permanent shading conditions can affect module service lifetime, due to accelerated ageing of the encapsulation material and thermal stress on the bypass diodes.
- <u>Maintenance</u> Regular maintenance is required to keep modules clear of snow, bird droppings, seeds, pollen, leaves, branches, dirt spots, and dust.

Source: https://www.canadiansolar.com/upload/31c65b6ed205c222/fda2176ef2f0ec68.pdf

September 2019 Photos









September 2020 Photos







The Jamesville Correctional Facility Contract states "...Seller will plant low growth seed mix one time at or around the Commercial Operation Date. Seller, at its sole discretion, will maintain the grass or undergrowth within the fenced array area. Any Purchaser requests of Seller for additional grass or undergrowth maintenance will be billed on a time and materials basis per occurrence".

Jamesville Correctional Facility began producing solar energy in April of 2018. We were informed by the Special Assistant to Chief Deputy of Corrections in September 2019 that the panels were wavy and uneven when they were installed. As a consequence of all the personnel changes surrounding this project, we were unable to find any documentation of a County Administrator or employee signing off on the array after it was installed.

Recommendations:

6) County administration should review the Contract for Jamesville Correctional Facility to explore the possibility of whether or not maintenance can be done to rectify the misaligned panels to optimize the solar arrays performance at no cost to the County. Once the review is complete, an estimate should be obtained for the regular trimming of grass and removal of plants from the panels.

Site Performance vs. Contracts:

SolarCity has an online client portal that provides daily kWh collection information for Onondaga County's three sites. The County was given login credentials to view the data and those credentials were shared with us for a portion of the audit. Upon review of the Solar City portal data and invoices from both SolarCity and National Grid, the audit revealed the following:

- **J.** None of the three sites met their first year projection for kWh collection from the Power Purchase Agreements.
 - o Per the Amended Power Purchase Agreement, Oak Orchard Lagoons was expected to produce 435,112 kWh in the first year of production. The actual amount of production invoiced for the first year was 426,894 kWh (98%), leaving a shortage of 8,218 kWh.
 - OPER the Amended Power Purchase Agreement, Oak Orchard WWTP was expected to produce 3,076,176 kWh in the first year of production. The actual amount of production invoiced for the first year of production was 667,106 kWh (22%), leaving a shortage of 2,409,070 kWh.
 - o Jamesville Correctional Facility was expected to produce 3,026,881 kWh per their Amended Power Purchase Agreement and actual invoiced was 2,068,845 kWh (68%), leaving a shortage of 958,036 kWh.
- **K.** Oak Orchard Lagoons—the first of the sites to launch—just completed its fifth year of operation on August 1, 2020. It only achieved 87% of the Contractual obligation as guaranteed in the Performance Guarantee Agreement for years 1-5.

Summary of First Year Activity and the First Five Year Milestone

Site	Expected 1st Year kWh	kWh Invoiced by SolarCity 1st Yr		Percentage of 1st Year Goal Achieved		Invoiced by		Percentage of 1st 5-Yr Goal Achieved
Oak Orchard Lagoons	435,112	426,894	N	98%	2,153,914	1,869,765	N	87%
Oak Orchard WWTP	3,076,176	667,106	N	22%	15,227,837	NA*	NA*	NA*
Jamesville	3,026,881	2,068,845	N	68%	14,983,816	NA*	NA*	NA*

NA* - Has not reached the first five year anniversary

- **L.** Upon our initial login to the SolarCity portal there was a notice related to the Jamesville Correctional Facility site stating that it was no longer reporting data. The date and time it stated it was offline on August 18, 2019, at 12:23am (Exhibit A). The problem was apparently corrected on August 29, 2019, based on the information we noted from accessing the SolarCity website.
- **M.** Downloaded data from the portal for kWh produced each day, month, and year for the sites includes estimated and negative kWh numbers from when the site was off line August 18-

- 29. The amounts produced should be equal to the kWh charged on each month's bill to the County.
 - The total kWh of energy produced as shown did not match the number of kWh of energy that was invoiced during the same time period.
 - o June 2018 and July 2018 show negative kWh of energy produced.

									-	
	Total kW	h Produ	ced Per I	Period Ac	cording t	o SolarC	ity Pow	erGuide V	Vebsite	
·							_			Total kWh Produced
<u>-</u>	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	in Period
Oak Orchard WWTP	24,962	40,718	34,857	28,880	20,207	83,560	83,560	(225,278)	(5,205)	86,261
Total kWh Invoiced for Period										
November 2017 - July 2018	34,857	kWh								

N. All three sites have a Performance Guarantee Agreements (along with the individual Power Purchase Agreements) which dictates the number of kWh SolarCity guarantees the sites will produce in five-year increments. The Performance Guarantee Agreements also state that if these milestones are not met, SolarCity will owe the County a price per kWh for each kWh below the guaranteed amount. The two tables below display the current and potential future monies owed to the County by SolarCity. The first table displays the actual amount currently due to the County for not reaching the 5-year kWh production milestone at Oak Orchard Lagoons. The second table displays potential monies due to the County for the Oak Orchard WWTP and Jamesville Correctional sites if they continue to produce at current rates.

Pro	duced kWh for l	First 60 Months	of Performan	ce Ag	reement		
Location	Actual 60 Month Milestone kWh	Guaranteed 60 Month Milestone kWh	Actual kWh Shortage from Guaranteed Amount	Guaranteed Energy Price per kWh Credit		Amount Due County for Under Production	
Oak Orchard Lagoons	1,869,765	2,153,914	284,149	\$	0.0361	\$	10,258

Potential Money Due to Onondaga County from SolarCity for Estimated Produced kWh for First 60 Months of Performance Agreement

Location	Estimated 60 Month Milestone kWh*	Guaranteed 60 Month Milestone kWh	Estimated kWh Shortage from Guaranteed Amount	Ene	naranteed ergy Price er kWh Credit	C	nount Due ounty for Under roduction
Oak Orchard WWTP	8,753,556	15,227,837	6,474,281	\$	0.0303	\$	196,171
Jamesville Correctional	10,470,292	14,983,816	4,513,524	\$	0.0338	\$	152,557
* Estimate is based on averag		\$	348,728				

Oversight of the SolarCity Contracts:

Initially, none of the County employees who were responsible for reviewing the National Grid bills could explain where the solar power credits appearing on the bills were coming from. The main contact we were provided at National Grid also could not explain where those credits came from. After an extended discussion with National Grid, we eventually located someone who could explain the solar energy credits on the bills and provide documentation for the calculation of the credits.

The discussion with National Grid revealed the three solar panel locations are not treated equally for billing purposes. Based on a review of the bills and correspondence with National Grid, two of the locations (Oak Orchard WWTP and Jamesville Correctional) have "host" accounts in which the kWh going back into the grid from the solar panels are calculated into a monetary credit for the County. These two accounts also have a separate "billing" account where National Grid invoices the County for electrical power used from their grid. The third location (Oak Orchard Lagoons) has a combination "host" and "billing" account where instead of monetary credits, there is a running balance of cumulative kWh credits.

Upon reviewing the National Grid invoices for energy used by the County as well as National Grid credits generated by the solar power produced by the Solar City panels, we noted the following:

O. We could not locate a County employee who, on a daily basis, is monitoring the production of the solar panel systems. Doing so would allow for comparison of data from the SolarCity portal to the National Grid and Solar City invoices.

- **P.** National Grid provided most of the information related to interpretation of the credits for the audit. We could not locate anyone from the County who views the National Grid bills and who knew where the credits were coming from or could explain how they were calculated.
- Q. We were unable to locate SolarGuard Gateway Monitor hardware (Monitor) at any of the three sites. The Monitors (sample in photo below) communicate with SolarCity's customer website and are detailed in the RFP responses submitted to the County. Having them was subsequently made a part of the Contracts, as well as the Power Purchase Agreements and the Solar Power Purchase Limited Warranty Agreements. Internal audit was provided temporary access to SolarCity's customer website during the audit. Based on our limited use of the website, it appears that when looking at a list of locations and one indicates that it is in "estimate" mode, rather than "actual" mode, it means that the site has stopped communicating with SolarCity's server and is offline.

During an early visit to the SolarCity customer website, one of the three County sites was indicating it was in estimate mode. When we clicked on that site for more information, troubleshooting instructions were given (Exhibit A) that outlined steps for rectifying the situation. Those steps included having someone look at the Monitor to report whether an error light was on, off or if it were blinking. The apparent inability to check the Monitor would seem to hinder efforts to diagnose the problem and report back to SolarCity. It also possibly contributed to the extended delay of August 18, 2019 to August 29, 2019 when the Jamesville site was finally brought back on line.



Recommendations:

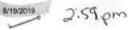
- 7) We recommend County administration revisit with SolarCity the contractual provision of having SolarGuard Gateway Monitor hardware onsite and accessible.
- **R.** We were unable to determine if the energy produced by the solar panels being pushed back into for credit was the same as the amount SolarCity kWh invoiced to the County because they were not measured in the same time period sequence. Per the Office of the Environment, review of these monthly invoices follows traditional departmental procedures and is reviewed by either the departments Fiscal Officer and/or the Financial Operations Liaison. When documentation for such review was requested by internal audit, we were told there was no documentation that could be provided.

Based on the above observations and analysis and inquiring of the Purchase Division and other departments, it appears no one has been assigned by the County to regularly monitor the SolarCity production provisions, actual production and invoicing, performance agreements, or the sites to ensure compliance with contract provisions. It also appears no one is monitoring the National Grid credits that relate to the energy produced from the solar panels.

Recommendations:

8) It is recommended the County more closely oversee the initiative for site issues, contractual adherence, site production vs. performance guarantees, and/or reviewing and reconciling invoices from the two project partners.

SECTION IV Exhibits



My SolarCity Account - SolarGuard Connection Status



Exhibit A

My SolarCity Account

SolarGuard Connection Status

Onondaga County - Jamesville

6960 East Seneca Tumpike

Jamesville, NY

2468.670 kW DC

View Monitoring

Monitoring Setup

Gateway Communication Status

Offline since 8/18/2019 12:23 AM

Your SolarGuard Gateway has stopped communicating to SolarCity's server and is no longer reporting data for the inverter. Ensure that the Gateway is powered on and the ERROR light is OFF.

PLEASE NOTE: SolarGuard will only work when the Gateway is online and the InvertenMeter is reporting data. The current system health cannot be determined at this time.

TROUBLESHOOTING:

The Gateway isn't powered on

 Power on the Gateway and allow up to 5 minutes to boot up. Normal boot up sequence has the ERROR light on solid for 30 seconds, blinks for up to 3 minutes, then turns off when successfully connected. Refresh this page once the ERROR light has gone off.

The Galaway is powered on and the ERROR light is BLINKING

- Ensure your Internet connection works through the same router the Gateway is plugged in.
- Salesway is possible to a Verify that your network will allow traffic to SolarCity's server by going to sg. solarcity.com and you should see "YOU HAVE REACHED SG.SOLARCITY.COM". If you are unable to access this page then SolarCity's servers may be down temporarily.
- Powercycle your internet Modern, Router and then the Geleway.
 There may be an issue with your router's firmware. Try upgrading your router's firmware. Refer to your router manufacturer or the router's user guide for how to upgrade the firmware.

 If the above doesn't resolve the issue, then contact Customer Care.

The Galeway has been powered for more than five minutes, but the ERROR. light is SOLID

Attempt powercycling the Gateway. If the issue persists, then there may be a problem with your Gateway. Please contact Customer Care.

The Gateway is powered and the ERROR light is OFF

If your gateway was replaced recently, the new one may have not been registered to your account. Please contact Customer Care and be prepared to provide the six digit MAC address located on the bottom of the Gateway (e.g. 2CB040)

You can Contact Customer Care by either emailing customercare@solarcity.com or calling 888-765-2489.

https://solarguard.solarcity.com/Kiosk/Status/?JID=3c77e66c-5c8a-4ff8-aa44-0e2c94cb993d

Additional Info

Help and Support

DONAGE Customer Care

Offline

My SolarCity Account - SolarGuard Connection Status

Inverter [20215] Communication Status Offline since 8/18/2019 12:11 AM Inverter [20216] Communication Status Offline since 8/18/2019 12:06 AM Inverter [20233] Communication Status Offline since 8/18/2019 12:06 AM Inverter [31920] Communication Status Offline since 8/18/2019 12:11 AM



Support Home | Find an Answer | My Solar Parties | Office Locations Privacy Policy | Terms Of Use | Copyright © 2019 SolarCity, All Rights Reserved.

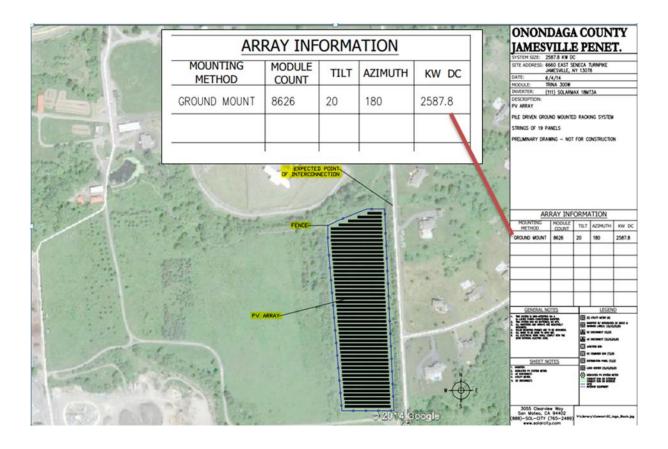
https://solarguard.solarcity.com/Kiosk/Status/7JIID=3c77e66c-5c8a-4ff8-aa44-0e2c94cb993d

2/2



Tilt and Azimuth

SolarCity's response to RFP #14-5100-002 and the Purchase Power Agreement for Jamesville's tilt and azimuth





Appendix A to Oak Orchard RFP

Information provided by Onondaga County to accompany RFP#13-5100-003

Relevant Information Obtained from the Actual Excel File Provided to Vendors in the RFP

Account #	Description	Delivery Voltage	Total kWh	Total Charges Utility & Supplier	RKVA	Metered Peak kW	Metered On Peak kW	Billed Peak kW	Avg. Peak kW	Billed On Peak kW	Load Factor	Bundled Electricity Rate (\$/kWh)
95225-151XX	Soule Rd.	>60	5,727,224	\$ 545,113.18	-	10,963.8		10,964	914	-	0.7	\$ 0.09518
33425-181XX	Baldwinsville STP	2.2-15	5,413,106	\$ 596,426.98	624.0	9,916.0	1	9,608	801	-	0.7	\$ 0.11018
66588-421XX	Meadowbrook	22-50	4,697,053	\$463,440.63	309.1	8,444.2	-	8,444	704	-	0.8	\$ 0.09867
93625-151XX	Oak Orchard WWTP	2.2-15	4,105,507	\$432,918.58	5,419.5	6,248.0	471	5,189	432	516	0.8	\$ 0.10545
42376-061XX	Brewerton WWTP	0-2.2	3,087,624	\$370,990.44	1,055.9	6,302.4	-	6,302	525	-	0.7	\$ 0.12015

^{*}Above is a portion of the information provided to the potenial vendors in the RFP. The full information was provided to Internal Audit by the Division of Purchase

^{**}Based on the above, there is \underline{only} one National Grid account number listed for the Oak Orchard WWTP

Exhibit D

Information for RFP # 13-5100-003

From documents provided to internal audit from the Division of Purchase

Vendors Responding to RFP	Sites Requested from County RFP	Date of RFP Response	Sites Quoted per Vendor
ConEdison	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP
Entecco	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP
O'Connell Electric	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Soule Rd. Oak Orchard WWTP Jamesville Penitentiary*
Rec Solar	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Oak Orchard WWTP
SolarCity	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP Oak Orchard Lagoons*
SolarLiberty	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 27, 2013	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP
Standard Solar	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Soule Rd. Oak Orchard WWTP
SunEdison	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP
TectaSolar	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP	June 28, 2013	Soule Rd. Meadowbrook Oak Orchard WWTP Brewerton WWTP Baldwinsville STP

^{*}Sites \underline{NOT} included in RFP documentation provided to internal audit

SECTION V DEPARTMENTAL RESPONSES



COUNTY OF ONONDAGA

OFFICE OF THE ENVIRONMENT

JOHN H. MULROY CIVIC CENTER

421 MONTGOMERY STREET - 14TH FLOOR

J RYAN McMAHON II SYRACUSE, NEW YORK 13202

TRAVIS GLAZIER

County Executive TELEPHONE: 315-435-2647 FAX: 315-435-8582

Director

TO: Pete Headd, Office of the County Comptroller

FROM: Travis Glazier

CC: Brian Donnelly, Daniel Hammer, Lee Klosowski

DATE: 12/16/2020

RE: Response to Draft Audit

Persistent issues remain within the *Audit of Solar Power Purchase Agreements*. The main source of issues is that the audit fails to recognize that the County entered into contracts to purchase electric power from SolarCity (now Tesla) and not to purchase solar panels or any other specified equipment. The solar panels constructed by Solar City (Tesla) are for their use and are owned, operated and maintained solely by Solar City (Tesla). Tesla uses its panels to meet its contractual obligations to sell electric power to Onondaga County under the terms of Power Purchase Agreements. In addition to the Power Purchase Agreements, there are Performance Guarantees that protect the County and its tax payers in the event Tesla fails to perform as intended. Overall, this report would have been more

valuable if the Comptroller's Office had a better understanding of the facets of these agreements which are framed in a manner that is customary in energy generation and procurement.

The Comptroller's Office met with Lee Klosowski, the person who oversaw these procurements and projects, one time in the process of writing this report and the recommendations reflect the lack of understanding which result therein. Instead of interviewing those officials noted by the administration as the appropriate sources, the report relies on unsourced information from unidentified County employees as a basis of findings in the Audit. This, coupled with a misunderstanding of the contract between the County and Tesla, Inc. (formally SolarCity), appears to be the source of what we believe are inaccurate statements and recommendations of the Audit.

Below are two categories of issues, the first are those issues which are pervasive and need to be corrected throughout the document. The second category of corrections are specific contentions that need to be addressed or mistakes where edits are necessary.

- The document should note that Tesla, Inc. is the current contract holder. On August 1, 2016,
 Tesla, Inc. purchased SolarCity and, per the transfer provision within the contract, the County
 Power Purchase Agreement (PPA) was transferred to Tesla, Inc. All present tense references to
 the contract holder and current party responsible for the arrays should be changed from
 SolarCity to Tesla, Inc. to ensure accuracy in the audit.
- 2. The Comptroller's office needs to better understand the contract between Onondaga County and Tesla, Inc.. Specifically, that Tesla, Inc. has leased the property from the County on which it has built its solar panels. While the County retains ownership of the property, the land is leased to Tesla, Inc. for its use. The contracts between Tesla, Inc. and the County include only the Power Purchase Agreement (PPA) and Performance Guarantee (also a Limited Warranty). There were no construction or product specifications within the request for proposal (RFP) which was issued by Onondaga County so all comments within the Audit pertaining to the following are wholly inaccurate:
 - Set-up requirements of the panels (tilt, azimuth, etc.)
 - An on-site readable meter.

Any and all references to specifications in the Audit need to be expunged to produce an accurate document.

The County does not pay Tesla for the use of the panels. The County pays for electricity that Tesla panels produce. The PPA is a Power Purchase Agreement, it defines the purchase of electric power by the County from Tesla. Because this contractual relationship is not correctly understood, the Audit misinterprets the responsibilities of the parties.

3. The audit document references specific employees in certain points and at other times uses general titles without specificity. In addition, the interview summaries were omitted from the Exhibits to back up the claims within the audit. This should be made uniform, preferably being specific to the positions and titles of each source of input or information. This information would be helpful in implementing the audit recommendations regarding training employees or review of billing.

Regarding more specific issues that should be addressed, please see below:

- 4. Page 8, first paragraph, it misrepresents a statement by the Director of the Office of Environment. As stated, the note about "drive down energy costs" implies that solar was presented as a vehicle to decrease costs to the County. The specific point was that it would help drive down costs for others (utilizing County purchasing power).
- 5. There are multiple issues with the Oak Orchard and the lagoon site references. Representatives from the Administration met with the Comptroller's Office multiple times on this matter yet it remains a glaring omission within the Audit. Oak Orchard Lagoons is on the same property and therefore the same site as Oak Orchard Waste Water Treatment Plant. This is further evidenced by the fact that the Year 1 Power Purchase Agreement price is the same \$0.06/kWh for both. Further, RFP 13-5100-003 stated the following (emphasis added):
 - 7.2.1 Host sites available for development For the purpose of this RFP, Appendix A provides information for Onondaga County sites that the County deems as favorable for solar PV development. Proposals shall be based on the information contained in Appendix A and will be binding for development of those sites. After award of a contract, the County and successful proposer may mutually determine that other sites are more favorable than those in Appendix A or that sites in addition to those in Appendix A are favorable for development. Regardless of the sites that are ultimately selected, this RFP shall be the basis for any Onondaga County sites developed for the August 29, 2013 Round of NYSERDA PON2589.

The aforementioned statement addresses multiple references in the audit regarding the proposal from SolarCity being the only RFP response which included the use of the "Oak Orchard Lagoons" array. Specifically, page 10 in the report under *RFP Issues* subsections A and C incorrectly cite what is in the RFP.

In addition, on page 8, there is a reference to an investigative interview with a "superintendent with County's Water Environment Protection Department" which states in general terms that the energy from the two solar arrays is intertwined with National Grid power utility grid. However, later in the document, under *Oversight of the SolarCity Contracts* section (page 22), the Comptroller notes that the three solar panel locations are not treated equally for billing purposes. Specifically, it states that "The third location (Oak Orchard Lagoons) has a combination 'host' and 'billing' account where instead of monetary credits, there is a running

balance of cumulative kWh credits." This contradicts the prior statement by the superintendent. As previously noted, the Comptroller's use of anonymous unidentified County employees is the primary source of these contradicting statements within the Audit, but it should also be noted that the Audit does not include any source material from these reports such as interview text or any backup to support the statements. Besides being inaccurate, it is also poorly sourced.

The County purchases electricity produced by the Tesla owned, operated and maintained, solar panels at a price per kWh contained in the Power Purchase Agreement which under its terms are escalated at 2% annually. The County is not paying Tesla, Inc. for the use of the panels.

At the Lagoons (Disinfectant Bldg.) meter on the Oak Orchard site, the kWh's produced by the solar arrays are in fact immediately used by the County. In this case the power produced by the solar arrays is connected "downstream" of the National Grid meter. When power produced by the solar system is less than the needs of the Lagoons (Disinfectant Bldg.), additional power flows from National Grid to meet the total building needs. When power produced by the solar system is greater than the needs of the Lagoons (Disinfectant Bldg.), the additional power flows to the National Grid system. This power flow from the solar system to the National Grid system effectively "turns the meter backward" reducing any prior use of power from National Grid. This is termed Net Metering. There are no monetary credits associated with this meter. There are times during the year the National Grid meter reading is zero because the power produced by the solar system is greater than the use by the Lagoons (Disinfectant Bldg.).

For both Jamesville Penitentiary and the Waste Treatment plant at the Oak Orchard site, the meters were too far from the solar systems to be connected "downstream" of the National Grid meter as was done at the Lagoons (Disinfectant Bldg.) and can therefore not be used directly in the facility or to "turn the meter backward". In the case of Jamesville Penitentiary and the Waste Treatment plant at the Oak Orchard site, the power purchased by the County that was produced by Tesla's solar system is delivered directly into the National Grid system at a separate National Grid meter. This is termed Remote Net Metering. Instead of turning the meter backwards as in the case of the Lagoons, National Grid provides a monetary credit to the County for the power the County delivers into the National Grid system at a value equal to the National Grid Service Class 2 non-demand (SC2ND) electricity supply rate. The rules for determining the SC2ND rate are contained in the National Grid tariff. The monetary credit National Grid provides for the power the County delivers directly into the National Grid system can be applied to the account where the solar system is located or any other account or accounts owned by the County in accordance with National Grid and PSC rules. In the case of these Remote Net Metered sites, the County purchases the power from Tesla, Inc. and delivers that power to National Grid. While the electrons produced by the solar panels are not the same electrons going into the County facility, the effect is the same.

6. First and foremost, all references in the section Construction (page 14) arise from the misunderstanding by the Comptroller's Office that the RFP included manufacturer or construction specifications. As previously noted, there were no such specifications and thus the panel specifications are outside of the County's scope of responsibility. Because the Audit misuses of the RFP Response as part of the contract, the Audit creates site specifications that do not exist. Again, the contract between Tesla and Onondaga County includes the PPA, the Warranty and the performance guarantee.

Please note that the Audit fails to provide any proof or documentation showing the azimuth was not within industry recommendations. In addition, the Audit uses stock photos from arrays which were clearly installed on man-made surfaces to relay the point that the "wavy" Jamesville array is somehow out of alignment. However, this assumption of misalignment does not acknowledge that the site plan, which the Audit references, shows the site topography lines that cross perpendicular to the array lines and thus denote the changes in elevation observed in the "wavy" appearance of the panels. This "wavy" effect, which in no way hinders the performance of the panels¹, not a misalignment of the panels on the site.

In addition, there are references to an external document on the Canadian Solar website but the URL included in the Audit which is not connected to a specific source. The Comptroller should source information for accuracy. It should be noted that, beyond not being within the scope of the responsibility of the County, the Comptroller's office has not demonstrated the expertise in engineering or physics to evaluate the performance and installation of the technology of this nature. Because there was limited sourcing within the Audit, the Administration can only assume that the Comptroller arrived at these errant conclusions because he relied on internal expertise of his office which we cannot confirm exists.

Regarding the only construction obligations which were signed off on by the County, SolarCity received a NOT from the Onondaga County Soil and Water Conservation District ending its stormwater pollution prevention plan (SWPPP) inspections on the site and a building permit verifying inspection by a certified electrical inspector. Beyond that, the obligations that are included in the contract are limited to performance guarantee and access to monitoring (the SolarGuard website).

- 7. Page 20 under letter L, there is a section which is bold, it appears to be a typo. Please correct.
- 8. Daily monitoring on a 20 year contract would be excessive in most circumstances. There is no logic or reason to monitor power production on a daily basis. The reconciliation and review of invoices should follow traditional departmental procedures and be reviewed by either the departments Fiscal Officer and/or the Financial Operations Liaison.

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 $^{{}^{1}\}underline{\text{https://www.solarpowerworldonline.com/2019/01/solar-can-be-installed-on-uneven-hilly-sites-with-relative-ease/\#:~:text=Ground\%2Dmount\%20solar\%20arrays\%20are,isn't\%20always\%20an\%20option.}$

- 9. Page 23, under Letter Q, the SolarGuard Gateway Monitor hardware (Monitor) is said to have been detailed in the Tesla, Inc. contract with Onondaga County. As previously stated, this is not part of the contract. The Audit states, that because of the lack of access to the Monitor, there is an inability to check the Monitor which hinders the County's ability to diagnose problems and report them back to Tesla, Inc. Please note that the Power Purchase Agreement does state the following:
 - c. Standard System Repair and Maintenance. Seller shall construct and install the System at the Facility. During the Term, Seller will operate and perform all routine and emergency repairs to, and maintenance of, the System at its sole cost and expense (including the payment of any sales taxes on services provided by others in the performance of such System repair and maintenance as set forth in 4(c) above), except for any repairs or maintenance resulting from Purchaser's negligence, willful misconduct or breach of this Agreement or the Site Lease (if applicable). Seller shall not be responsible for any work done by others on any part of the System unless Seller authorizes that work in advance in writing. Seller shall not be responsible for any loss, damage, cost or expense arising out of or resulting from improper environmental controls or improper operation or maintenance of the System by anyone other than Seller or Seller's contractors. If the System requires repairs for which Purchaser is responsible, Purchaser shall pay Seller for diagnosing and correcting the problem at Seller or Seller's contractors' then current standard rates. Seller shall provide Purchaser with reasonable notice prior to accessing the Facility to make standard repairs. Throughout the term, Seller will not unreasonably interfere with Purchaser's ordinary use of the Facility; provided, that constructing, maintaining, repairing, restoring and removing the System in accordance with this Agreement will not constitute unreasonable interference. Seller shall notify the Purchaser a reasonable time prior to conducting work that will affect deliveries or shipments to or from to the Facility, produce safety hazards, or cause electrical outages affecting Facility operation. The Parties shall cooperate to avoid interfering with deliveries of supplies to Purchaser, which Seller acknowledges are critical to the proper and secure operation of the Facility. Purchaser shall notify Seller of the anticipated schedule of supply deliveries one week in advance, if commercially practicable. Seller shall schedule its deliveries so as not to interfere with supply deliveries of which Purchaser has notified it. Seller shall notify Purchaser of its anticipated major equipment deliveries 48 hours in advance.
- 10. The PPA paragraph 12 Measurement states the following:

Electricity delivered to the Facility shall be measured by the SolarGuard monitoring system installed and maintained by Seller as part of the System. Purchaser shall have the right to retain all System output data and reports, which shall be provided to Purchaser on a monthly basis. Purchaser shall have the right to witness any calibration or testing of the monitoring system so as to verify its accuracy.

11. Page 24, the numbering of recommendations states 1 and then 7 which is confusing. I believe it is a typo and should be 7 and 8, but should be clarified.

Notwithstanding the prior notes, recent edits do highlight some beneficial recommendations that the County Administration will implement.

 The procurement process was conducted in alignment with New York State general municipal law and Onondaga County local resolutions. Lotus Notes is the contract records database. The contracts are an outcome of the procurement process, but Lotus Notes is not a catalog of the procurement process.

The training manual was necessary at a time when the process was decentralized and is no longer relevant as these efforts have been centralized within the Division of Purchase. The most recent process directive was developed by the prior administration, and the current administration is in the process of modernizing the document to reflect the best practices being used today.

- 2. While not included within the recommendations section, any enforcement of the County contract with Tesla, Inc. (formerly SolarCity) is pursued through the County Law Department. The tabulations in the audit process by the Comptroller's office were helpful in this pursuit.
- 3. As recommended by the Audit, reconciliation of power production from Tesla, Inc. with the National Grid billing would provide assurance that contractual obligations are met. Since performing daily oversite is excessive on the enforcement of a 20 year contract, The Administration appreciates the County Comptroller continuing in this endeavor throughout the life of the contract utilizing the office expertise which led to the findings in this Audit.

These recommendations will improve County services and ensure that the contractor, Tesla, Inc. is held to the letter of its contract with the County.



Martin D. Masterpole Comptroller

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Deputy Comptroller/Accounting

Peter J. Headd

Deputy Comptroller/Audit

Clarification of Management Response to Audit Findings

- The County's Request for Proposal process was largely disregarded for the project and the Division of Purchase did not respond to the audit findings and/or recommendations made by the Office of the Comptroller.
- During the bid process, and before a signed contract, the Seller (SolarCity) included a site that was not originally noted on the Request for Proposal.
- Regardless of the ultimate outcome from the circumvention of the correct process for the Request for Proposal, this project necessitates additional financial review and a more in depth oversight versus traditional departmental procedures.
- Acknowledging the Contract is for the purchase of electricity, the maintenance and upkeep of the physical site locations, as well as the oversight of hardware issues, are crucial with ensuring optimal electricity production and long term life of the panels.
- We acknowledge SolarCity was acquired by Telsa yet remains a subsidiary of Telsa.