



Fort Collins Solar Power Purchase Program
2014 Program Guidelines



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Table of Contents

- I. Overview**
 - Fort Collins Utilities' Solar Power Purchase Program**
 - Background**
 - Renewable Energy Standard (RES)**
 - Feed-in-Tariff Model**
 - Fort Collins Renewable Programs Portfolio**
- II. Eligibility and Program Structure**
 - Program Stipulations**
- III. Application and Selection Process**
 - Program Sequence Summary**
 - Process Steps**
 - Summary of Fees**
- IV. Post Selection Requirements**
 - Shortlist Interconnection Review**
 - Development and Construction**
 - Extensions and Penalties for Default**

Appendix A: Interconnection Scenarios

Appendix B: Program Sequence Summary

Appendix C: Service Territory Maps

Appendix D: Application and Submittal Documents

Appendix E: Interconnection Review Process and Fees

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Rev 12-10/2013

I. Overview

Fort Collins Utilities' Solar Power Purchase Program

Fort Collins Utilities' Solar Power Purchase Program (SP³) encourages the installation of new local solar systems on behalf of all Utilities customers. With final approval by Fort Collins City Council in June 2013, this pilot program will help meet Utilities' renewable energy commitments under the Colorado Renewable Energy Standard (RES).

The basis of the SP³ is a fixed-price, 20-year Power Purchase Agreement (PPA) between Fort Collins Utilities ("Utilities") and commercial customers for solar energy generation. This arrangement is commonly known within the solar industry as a "feed-in-tariff model." The customer may enter agreements with solar developers for the installation of the system, which also may include financing, lease-purchase and rooftop property leasing.

The energy output of the solar system goes directly to Fort Collins Utilities' electric grid ("in front of the meter") and system owners are paid based on their PPA. The agreement does not alter the customer's electric bill. The PPAs also convey the Renewable Energy Credits (RECs)—the right to claim the renewable energy attributes of a project—to Utilities to be used toward compliance with the Colorado RES.

Utilities current renewable energy commitments are met through a mix of wind energy projects, renewable energy credits and local solar installations. Faced with making new investments in renewable energy, Utilities proposed to meet a portion of its commitment through a program that focuses on the installation of solar systems on local customers' premises. Similar successful programs are in place in a number of locations throughout the country and world.

The solar projects from this program will meet approximately 25 percent of the renewables goal for 2015. In addition, the locally produced renewable energy supports the community's *Climate Action Plan* and *Energy Policy* greenhouse gas reduction goals while supporting local investment. City Council authorized funding for the program in June 2013, which is capped at \$1 million/year and funded by a 1/2 percent rate increase in 2013 and 2014. Additional investments for renewable energy via other options also will be needed to meet the RES commitments.

Background

Renewable Energy Standard (RES)

Utilities' 2015 renewable target, under the RES, is to provide 6 percent of retail electric sales from renewable energy sources. This target corresponds to a total renewable energy level of 90,000 megawatt-hours (MWh), which is an increase from current renewable energy levels of approximately 45,000 megawatt-hours (MWh). There are several ways Utilities could meet the increased requirements, including:

1. Purchase of qualified renewable energy credits.
2. Wind energy, through development or participation in new utility-scale projects.
3. Solar energy, through development or participation in new utility-scale projects.
4. Solar energy, through a program which supports the installation of systems located locally on customer premises (e.g., on Utilities' electric distribution system).

The RES includes the option to use “multipliers” that provide additional benefits based on renewable energy technology and location. The RES multiplier for locally based solar energy is 3X, meaning that solar energy produced counts three times towards the RES obligation. The multiplier was designed to make solar energy investments competitive with wind energy investments.

Feed-in-Tariff Model

SP³ is based on what the solar industry calls a feed-in-tariff (“FIT”), which provides a standard price for renewable energy that feeds electricity directly into the utility grid. Instead of locating the solar generation at a remote location, the solar systems are located on customer sites. The key feature of the FIT is a standard, long-term, fixed-price Solar Power Purchase Agreement (“SPPA”). The stable contract price provides financial certainty for all parties and encourages partnerships between solar developers, host customer sites and sources of financing.

Fort Collins Renewable Programs Portfolio

SP³ is a new program, expanding solar program opportunities for customers. Utilities has other renewable energy options, including

- Solar Rebates and Net Metering: funds are appropriated annually which provide up-front rebates for the installation of residential and small scale commercial solar PV systems.
- Green Energy Program: customers can choose to pay a premium for Green-e certified renewable energy.
- Community Solar Garden: a new option for customers in early 2014 will be to purchase a share of a community solar garden.

II. Eligibility and Program Structure

Any commercial premise served by Fort Collins Utilities is eligible for this on-site solar program. Projects will be accepted in two classes:

- Class-1, Small Projects, 10 to 100kW
- Class-2, Large Projects, >100kW to 1000kW DC

Program Stipulations

- Projects will be located on the premise of Fort Collins Utilities' commercial customers

- Solar photovoltaic (PV) systems range in size from 10 to 1,000 kilowatts (kW DC)
- 1,000 kW maximum aggregate capacity on any single parcel
- 2,000 kW maximum capacity for a single customer entity for multiple parcels and projects
- Grid interconnection “in front of the customer meter” (achieved by actual point of interconnection or billing adjustment)
- Payments are made for metered production
- A minimum of 25 percent of program funds are reserved for systems sized between 10 and 100 kW (applications in the small and large system categories will be handled as separate groups. See below.)
- Power Purchase Agreement (PPA) between system owner and Fort Collins Utilities as agent for Platte River Power Authority
- Two-tier, 20-year, fixed-price standard offer
 - Class-1, 18¢/kWh 10 kW-100 kW
 - Class-2, 15 ¢/kWh >100 kW to 1,000 kW
- Class-1 projects must be operational in 6 months from time of acceptance of the SPPA, Class-2 projects must be operational in 12 months. All projects must be completed by June 2015. See program sequence below.
- Utilities retains Renewable Energy Credits (RECs)
- Applications will be accepted on a modified first-come, first-served basis (See below.)
- The project development team must document prior experience with at least one project of similar size.
- Insurance requirements are delineated in the Utilities Interconnection Standards.

III. Application and Selection Process

The intent of the Fort Collins Utilities Solar Power Purchase Program is to contract for solar capacity up to the limit of budgeted funds.

The first period for accepting applications closed on September 22. The second application period closes at midnight February 2, 2014. Application to the program will be by email submittal only to utilities@fcgov.com . The email time-stamp will determine the time of submittal. Project selection will begin on February 3.

A complete submittal will include:

- completed Application form
- completed Site Control form
- completed Project Development Team form
- Site/Facility layout diagram
- Facility one-line diagram
- Scanned copy of all pages requiring signatures

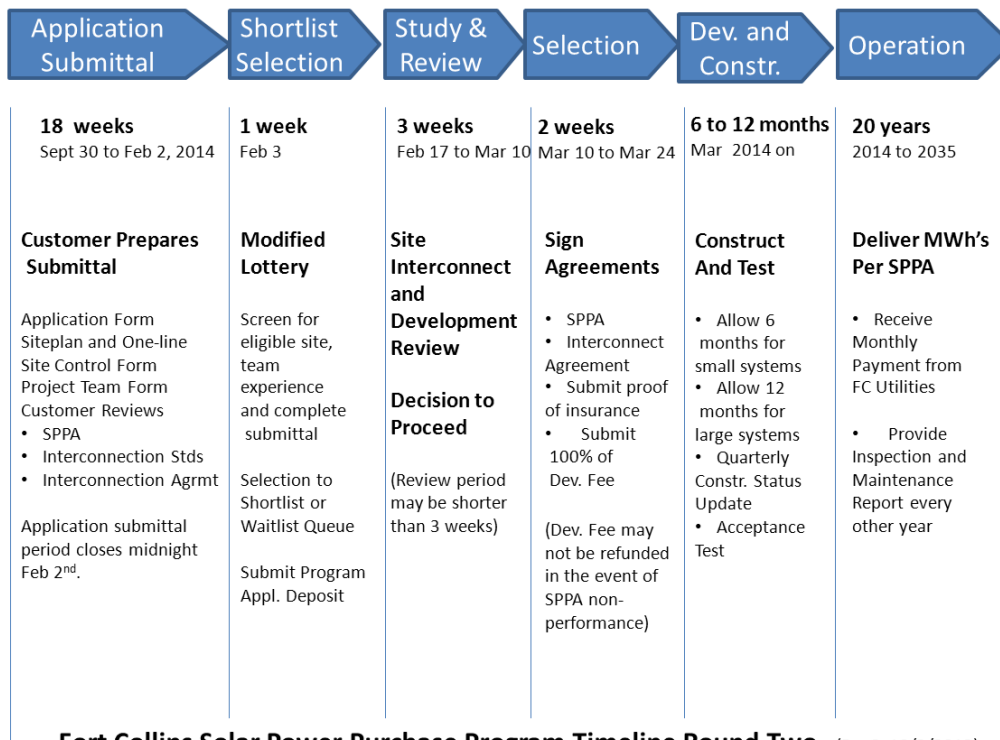
If complete and approved applications exceed the limit of funds available, all complete applications received prior to the closing of the application period will then be entered into a lottery. The results of the lottery drawing then determine an Application’s ranking on the project selection shortlist. Time and location of the lottery drawing will be available on the web (www.fcgov.com/solar). The lottery drawing is open to the public.

If available funds are not fully committed by the applications received, those applications in-hand will be placed on the shortlist in the order received and applications received subsequently will continue to be accepted on a first-come-first served basis. Applications received after all funds have been committed will be placed on a waitlist.

Class 1 and 2 applications will be handled as separate pools, except that in the event that Class 1 (‘Small Projects’) reservation capacity is filled and the Class 2 category has not been filled, ‘Small Projects’ will then fall into the ‘Total’ category until the Total category is exhausted.

Once a project is accepted into the program, the project must be completed within its allotted time frame. Class 1 will have six months from the date of acceptance and Class 2 Systems will have twelve months from date of acceptance. It is the sole responsibility of the system owner to make sure that the Fort Collins Neighborhood Services (planning, zoning and project permitting) and the Utilities Engineering department are contacted in a timely manner to allow for the completion deadlines to be met.

Program Sequence Summary



Fort Collins Solar Power Purchase Program Timeline Round Two (Rev6, 10/2/2013)

(See larger version of this chart in Appendix B.)

Process Steps

An applicant must complete the following steps in order to remain qualified for the SP³ before receiving any payment for energy produced:

- 1) Submit a complete application with all required documents and payment for all applicable fees and deposits;
- 2) Be accepted by Utilities for assigned capacity and submit program application fee;
- 3) Receive engineering approval of the project plan in a timely manner;
- 4) Sign and execute the SPPA;
- 5) Meet payment obligations for any Utilities electrical distribution system upgrades that may be required to accommodate the PV system, if any;
- 6) Satisfy all applicable permitting, building code, planning and land use requirements;
- 7) Pass Utilities system inspection and be interconnected to the distribution system;
- 8) Complete the project by the required completion date based on the time of signing of the SPPA;
- 9) Provide documentation of final system cost and capacity to Utilities

Summary of Fees

Item	Amount (\$)	Time Due
Project Deposit (10kW – 100 kW DC)*	\$500	At time of shortlisting
Project Deposit (101kW – 1000kW DC)*	\$1000	At time of shortlisting
Electric Development Fee	Standard Fee schedule **	At signing of SPPA

* The project deposit will be refunded when the facility becomes operational

** See Appendix E

Special Note on zoning and land use:

The applicant is strongly encouraged to work with the city planning department to verify proper zoning and satisfy planning requirements as soon as they are able. (www.fcgov.com/zoning) Zoning, land use and development review may cause project delays that the applicant should be well aware of before proceeding with the project. (Some rooftop projects may be deemed “use by right” and accommodated under the standard building permit process taking a few weeks. Most projects may require a “minor amendment” zoning review process taking from 2 to 8 weeks. New development may require full development review taking as much as six months.) Utilities is not liable for any delays due to city zoning or permitting issues.

IV. Post Selection Requirements

Shortlist Interconnection Review

If a project is selected to the shortlist, an initial engineering review will be scheduled to identify any technical questions with respect to the interconnection of the proposed project with the Utilities electric distribution system. Any system upgrades to accommodate the project will be identified and development fees will be determined per Utilities standard development fee schedules. (See Appendix B Program Timeline and Appendix E Interconnection Review Process and Fees).

Development and Construction

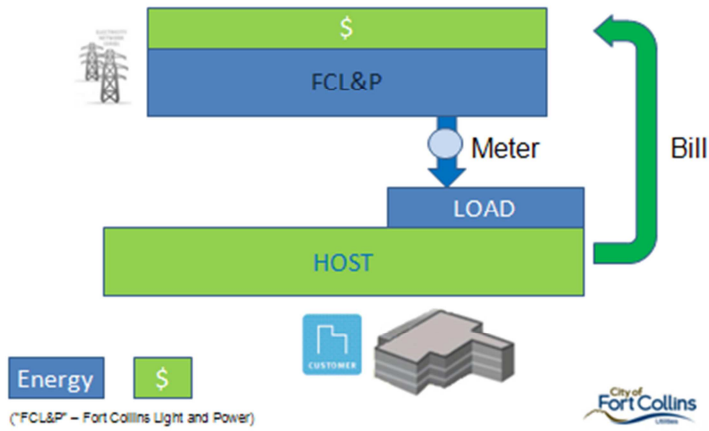
The project will have two weeks from the reporting of interconnection study to confirm a decision to proceed with the project and pay the applicable development fees and sign the SPPA and Interconnection Agreement. (Failure to deliver signed agreements and fees on time will be cause to be removed from the program.) The 6 month (Class 1) or 12 month (Class 2) construction window begins at this point in time. Thereafter, quarterly status updates will be requested to confirm progress. Please refer to the SPPA contract for performance obligations under this agreement.

Extensions and Penalties for Default

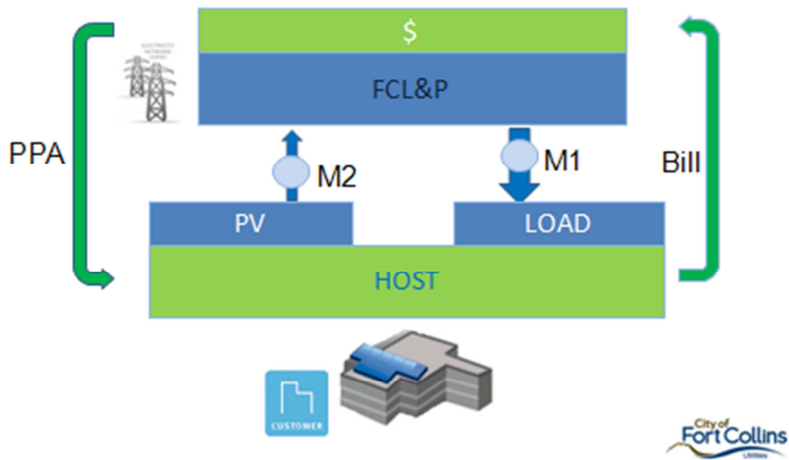
There will be absolutely no extensions given to projects prior to their beginning construction. An extension will only be considered if the SPPA has been approved and executed by both parties and the project is substantially constructed by the deadline associated with their Class. All Class 1 systems will need to be constructed and operational within six months of acceptance. All Class 2 systems will need to be constructed and operational within twelve months of acceptance. “Substantially constructed” means 65% of the equipment, by total system cost, is in place at the facility. Failure to meet the completion deadline may result in the forfeiture of the development fees and termination of the SPPA. All SP3 solar facilities must be operational by June 30th, 2015.

Appendix A: Interconnection Scenarios

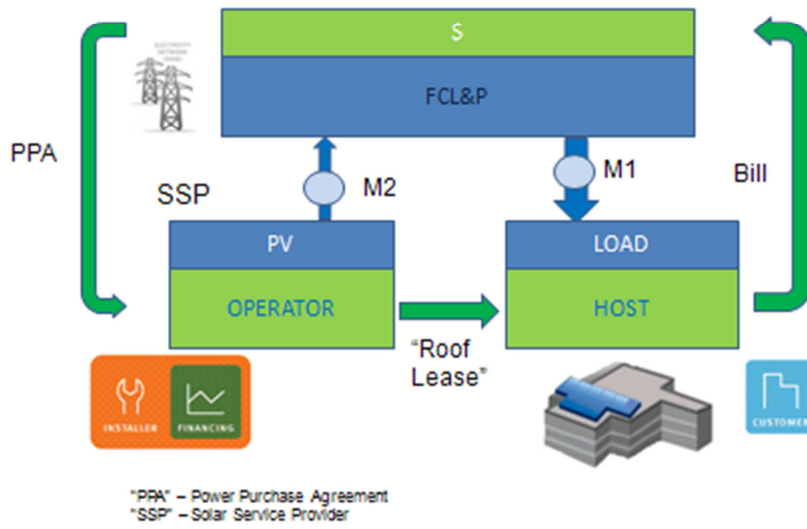
FCL&P and Host Customer



FCSP FIT PPA with Host



FCSP FIT PPA with SSP



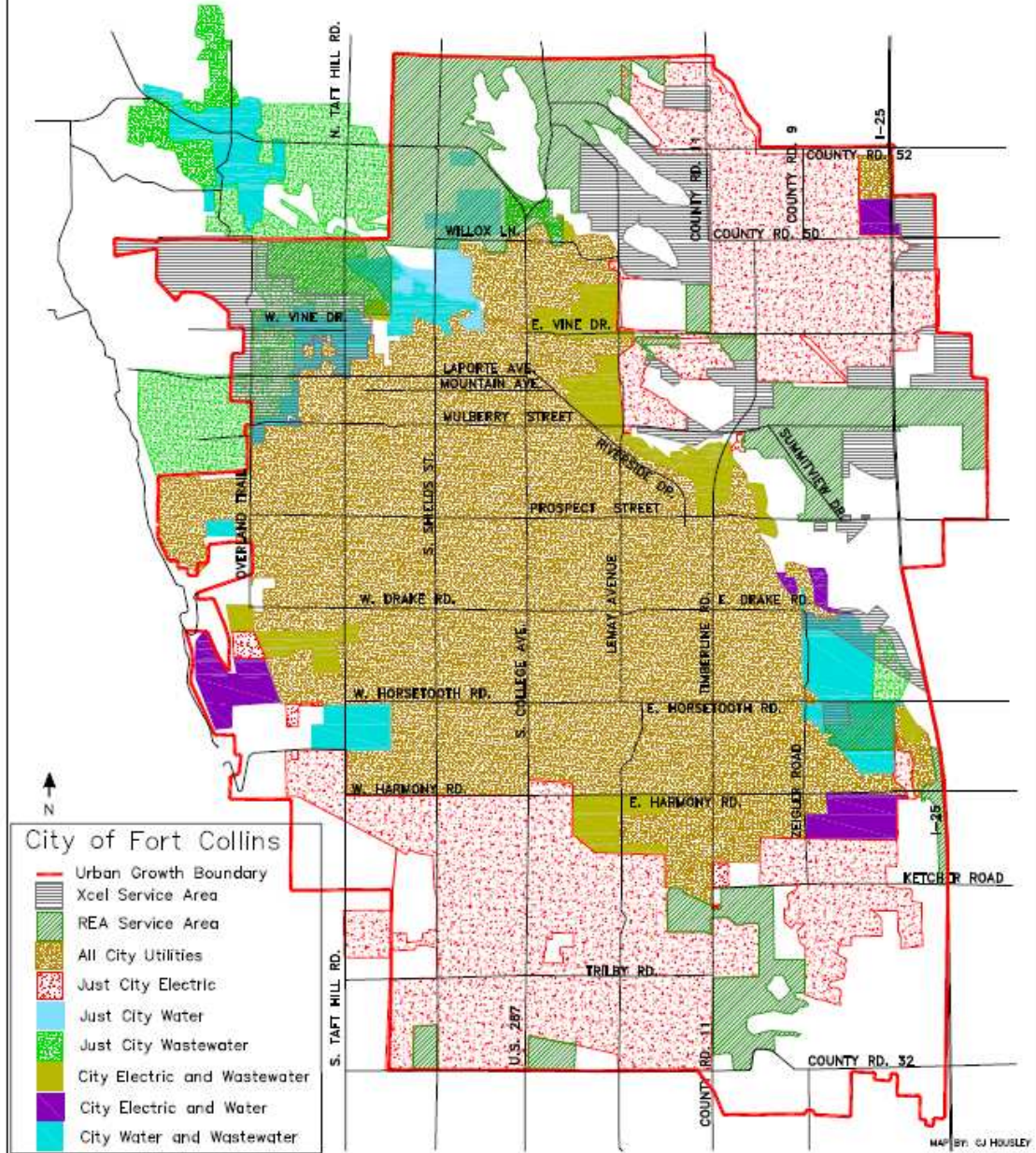
Appendix B: Program Sequence Summary

Application Submittal	Shortlist Selection	Study & Review	Selection	Dev. and Constr.	Operation
18 weeks Sept 30 to Feb 2, 2014 Customer Prepares Submittal Application Form Siteplan and One-line Site Control Form Project Team Form Customer Reviews <ul style="list-style-type: none"> • SPPA • Interconnection Stds • Interconnection Agrmt Application submittal period closes midnight Feb 2 nd .	1 week Feb 3 Modified Lottery Screen for eligible site, team experience and complete submittal Selection to Shortlist or Waitlist Queue Submit Program Appl. Deposit	3 weeks Feb 17 to Mar 10 Site Interconnect and Development Review Decision to Proceed (Review period may be shorter than 3 weeks)	2 weeks Mar 10 to Mar 24 Sign Agreements <ul style="list-style-type: none"> • SPPA • Interconnect Agreement • Submit proof of insurance • Submit 100% of Dev. Fee (Dev. Fee may not be refunded in the event of SPPA non-performance)	6 to 12 months Mar 2014 on Construct And Test <ul style="list-style-type: none"> • Allow 6 months for small systems • Allow 12 months for large systems • Quarterly Constr. Status Update • Acceptance Test 	20 years 2014 to 2035 Deliver MWh's Per SPPA <ul style="list-style-type: none"> • Receive Monthly Payment from FC Utilities • Provide Inspection and Maintenance Report every other year

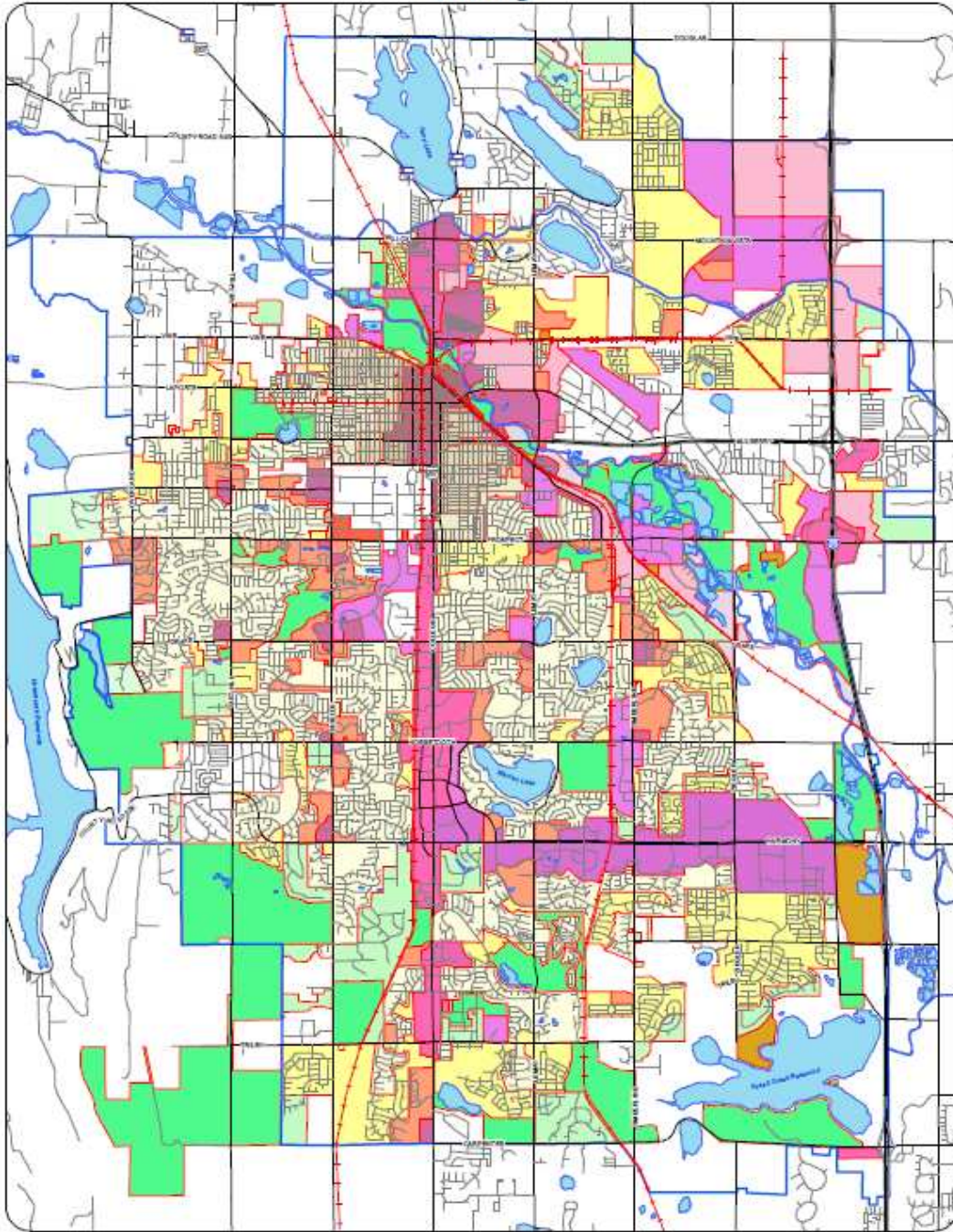
Fort Collins Solar Power Purchase Program Timeline Round Two (Rev6, 10/2/2013)

Service Territories Within UGA Boundary

REVISION DATE: 03-20-2013



City of Fort Collins Zoning



Growth Management Area	General Commercial	Employment	Neighborhood Commercial
Water Features	Limited Commercial	Harmony Corridor	Neighborhood Conservation Buffer
City Zoning	Service Commercial	Industrial	Neighborhood Conservation Low Density
Community Commercial	Commercial North College	High Density Mixed-Use Neighborhood	Neighborhood Conservation Medium Density
Community Commercial North College	CSU	Low Density Mixed-Use Neighborhood	Public Open Lands
Community Commercial Route River	Downtown	Medium Density Mixed-Use Neighborhood	River Conservation
			River Downtown Redevelopment
			Residential Footcote
			Low Density Residential
			Transition
			Urban Estates

CITY OF FORT COLLINS
WATER AND WASTE WATER SYSTEM MAP PRODUCTS
 This map is an advisory tool and does not constitute a warranty of any kind. The City of Fort Collins is not responsible for any errors or omissions on this map. The City of Fort Collins is not responsible for any damages or losses resulting from the use of this map. The City of Fort Collins is not responsible for any changes to the map data after the date of publication. The City of Fort Collins is not responsible for any changes to the map data after the date of publication. The City of Fort Collins is not responsible for any changes to the map data after the date of publication.



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Appendix D: Application and Program Documents

Please see separate attachments at www.fcgov.com/solar under the heading “Solar Power Purchase Program”

- 1) Application (Project Data, Site Control, and Project Team forms)
- 2) Draft Standard Offer Power Purchase Agreement
- 3) Draft Interconnection Agreement
- 4) Program Sequence Summary
- 5) FAQs

Note: Sample agreements are currently in draft form and subject to change. Please check the website for updates from time-to-time.

Appendix E: Interconnection Review Process and Fees

Process

If a project is selected to the shortlist, an initial engineering review will be scheduled to identify any technical questions with respect to the interconnection of the proposed project with the Utilities electric distribution system. Any system upgrades to accommodate the project will be identified and development fees will be determined per Utilities’ standard development fee schedules. The project will have two weeks from the reporting of this initial review to confirm a decision to proceed with the project pay the applicable fees and sign the SPPA and Interconnection Agreement. (See Program Timeline – Appendix B)

Fees

Development fees for SP³ projects are likely in most cases to be handled in the category of “service upgrades.” With commercial service, the customer (building owner) owns the service drop on the secondary side of the transformer. If it is deemed that there is no upgrade of service on a primary side lateral and/or transformer, no development fees would apply. The project would incur whatever costs are involved to interconnect on the secondary side.

Utilities would continue to own the step-down transformer and upstream fuse devices and/or re-closers. The PV project would bring secondary conduit/conductor to the transformer pad. Fault protection (beyond the interconnection guidelines for the Utility system feeder/transformer) to protect the PV system is the customer’s responsibility.

Standard service upgrade fees will apply with adjustments for a generation-only interconnection. For example, “capacity fees” of approximately \$65.00 per kVA are reduced to \$53.00/kVA for generation-only service. Utilities study and review expenses are included in the standard development fees.

Further information can be found at:

<http://www.fcgov.com/utilities/business/builders-and-developers/plant-investment-development-fees/>

and a fee calculator at:

<http://www.fcgov.com/utilities/business/builders-and-developers/plant-investment-development-fees/electric-development-fee-estimator?id=3>

Fort Collins Utilities Interconnection Standards can be found at:

http://www.fcgov.com/utilities/img/site_specific/uploads/interconnection_standards.pdf

For service upgrades “per square foot” and “per frontage foot” charges will not generally apply (these are for new or “greenfield” development). Development fees will include a capacity charge “per 100 amps” of additional capacity to serve the PV system, a “trenching fee” if Utilities must upgrade conductor from a lateral circuit to a transformer pad, a transformer setting fee and the cost of meter socket and production meter CT’s.

Representative Electric Development Fees

(For scoping purposes only, based on online fees calculator using 85% factor for service entrance – i.e. transformer capacity- costs):

(1) **Existing 25 kVA, 100A site** with adequate single phase interconnection:

Cost per Sq.Ft.:	0.0
Cost per Linear Ft.:	0.0
Primary Circuit extension: (none)	\$ 0
Transformer Installation:	\$ 0
Service Entrance: single phase	\$ 0
TOTAL \$0.00	

(2) **Upgrade 25 kVA site to 100kVa**, single phase: 240V, 400 amp

Cost per Sq.Ft.:	0.0
Cost per Linear Ft.:	0.0
Primary Circuit extension: (none)	\$ 0
Transformer Installation:	\$ 1,300
Service Entrance (x 0.85) +300A	\$ 3,468
TOTAL \$4,768	

(3) **25 kVA to 100kVA, three phase**, 480V, 200A

Cost per Sq.Ft.:	0.0
Cost per Linear Ft.:	0.0
Primary Circuit extension: (100 ft)	\$ 2,400
Transformer Installation:	\$ 2,380
Service Entrance (x 0.85): +100A	\$ 4,005
TOTAL \$8,785	

(4) **“Upgraded” 1000 kVA**, three phase: 480V, 1200 amp

Cost per Sq.Ft.:	0.0
Cost per Linear Ft.:	0.0
Primary Circuit extension: (500 ft)	\$ 12,000
Transformer Installation:	\$ 2,380
Service Entrance (x 0.85): +1200A	\$ 48,062

TOTAL \$62,442

(5) **“New Service” 1000 kVA**, three phase: 480V, 1200 amp

Cost per Sq.Ft. (5 acres, 218,000 sq. ft.):	\$ 9,701
Cost per Linear Ft. (Est. 500 ft.) :	\$20,055
Primary Circuit extension: (500 ft)	\$12,000
Transformer Installation:	\$ 2,380
Service Entrance (x 0.85): +1200A	\$48,062

TOTAL \$92,198