

Council Study Session

September 17, 2018

Agenda Item	Request for Proposals for Imperatrice Property Solar Project	
From	Adam Hanks	Assistant to the City Administrator
	Tom McBartlett	Interim Electric Utility Director
Contact	adam.hanks@ashland.or.us , thomas.mcbartlett@ashland.or.us	
Item Type	Requested by Council <input type="checkbox"/> Update <input type="checkbox"/> Request for Direction <input checked="" type="checkbox"/> Presentation <input type="checkbox"/>	

SUMMARY

City staff has developed a draft Request for Proposals (RFP) for a large scale (10-12 MW) solar generation project to be located on the City owned Imperatrice Property. The intent of the RFP is to solicit and receive current, market based proposals to assist in determining the cost to the City of the electricity generated as well as a realistic timeline for the completion of the proposed project. Staff is requesting direction from Council to complete and issue the RFP in mid-October to receive and review proposals in mid to late November.

POLICIES, PLANS & GOALS SUPPORTED

Climate and Energy Action Plan Action BE 1-3 – Facilitate and encourage solar energy production
City Council Goal 4.4 – Examine long term use of Imperatrice property

BACKGROUND AND ADDITIONAL INFORMATION

The draft RFP is a key component in the continued effort to meet the requirements of the 10 by 20 ordinance that was approved by Council in September of 2016. This citizen authored ordinance mandates that the City “cause to produce” ten percent of the community’s annual electricity consumption from clean, local and new sources by 2020.

Three 10 by 20 ordinance agenda items have come before Council since the ordinance’s approval that in combination provide a solid background of the issues and work done to date.

[November 15, 2016](#) – Discussion of policy questions to be addressed regarding the 10 by 20 Ordinance

[February 21, 2017](#) - 10 by 20 Ordinance Project Update

[July 17, 2017](#) – 10 by 20 Status Update

[December 18, 2017](#) – 10 by 20 Ordinance Activity Update

Several important report/studies have been completed that will be utilized as reference materials for the RFP.

- 1) 2017 Biological Assessment of the Imperatrice Property – Pacific Crest Consulting LLC
- 2) Solar Photovoltaic Generation Interconnect Analysis – OS Engineering – January 31, 2017
- 3) Electric Utility Rate Design Study – Utility Finance Solutions, LLC – May 15, 2018

FISCAL IMPACTS

Significant staff time has been invested in the 10 by 20 ordinance implementation efforts since its approval in fall of 2016. Additional costs of approximately \$25,000 have been incurred to develop the Interconnection Analysis, the biological assessment and the rate design analysis addendum.

The recently completed rate design analysis incorporated estimated additional one time and on-going costs to the Electric Utility if the project were to be constructed and the electricity purchased by the City and delivered onto its distribution grid. The resulting estimated rate increase of between 11-16% were based on a seven cent per kwh purchase price plus identified increases in transmission contract costs and capital costs associated with the interconnection of the project to the distribution grid

The draft RFP has been developed with technical assistance from a partner agreement with the Bonneville Environmental Foundation at no additional cost to the City. BEF and OS Engineering will also be utilized in the review of RFP responses received.

DISCUSSION QUESTIONS

- 1) Does Council wish to direct staff to finish the draft RFP with a target release date no later than mid-October?
- 2) Would Council prefer to see the final RFP prior to its release? (Staff feels this is a 90-95% complete document but would like a final peer review prior to its release)
- 3) Does Council want to consider including an option in the RFP for a project that is not directly connected to the City's distribution system? (generation purchased by Pacific Power or other utility)

SUGGESTED NEXT STEPS

Staff recommends that Council direct staff to complete and issue the RFP in mid-October. This provides staff, Council and the community with objective, market based costs and timelines essential to making a final determination on the impact of the project to the Electric Utility and ultimately, the retail rates of the customers of the community.

REFERENCES & ATTACHMENTS

- 1) Draft RFP for Solar Generation Project
- 2) Electric Utility Rate Design Study – Utility Finance Solutions, LLC – May 15, 2018



**Request for Proposals
City of Ashland
Ashland SOLAR RFP
Issued:
Due Date:**

**Ashland Municipal Electric Utility
90 N Mountain Ave
Ashland, OR 97520**

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I. INTRODUCTION

A. COMPANY OVERVIEW

The City of Ashland Municipal Electric Utility (“Ashland” or the “City”) is the second oldest Municipal Utility in Oregon. With Ashland’s publicly owned utility, citizens control the policy making and operations of the utility directly through it’s elected officials. This assures local control and accountability. Ashland is interested in diversifying its generation portfolio while meeting certain energy resource goals set forth in its “10 by 20 Initiative”. It is with these goals in mind that the Company is issuing the “Ashland Solar RFP” to procure up to 13MW DC capacity of solar photovoltaic resource. The solar capacity to be developed and sold to Ashland will also be referred to as “the Project”.

II. GENERAL INFORMATION

A. RFP SCHEDULE

Event	Target Schedule
Issue RFP	October 15, 2018
Bidders Questions Due	October 26, 2018
Proposals Due	November 16, 2018
Interviews	TBD–No earlier than 11/26/18
Selection	TBD
Execution of Contract	TBD
Project Commercial Operation, no later than	12/31/2020

B. COMMUNICATIONS

All communications from companies responding to this RFP (“Bidders”) to Ashland, including questions pertaining to this RFP, must be submitted via email. Ashland will respond to Bidders via email, or conference call. All submittals, questions, and communications shall be conducted through the following single point of contact:

Adam Hanks
 Assistant to the City Administrator
 City of Ashland
 Email: adam.hanks@ashland.or.us
 Phone: 541-552-2046

C. ELIGIBILITY REQUIREMENTS FOR RESPONDENTS

1. INSURANCE REQUIREMENTS

Bidder will complete the Bidder's Insurance Proposal document located in **Appendix XX**

2. FINANCIAL INFORMATION AND CREDIT REQUIREMENTS

Bidder will complete the Bidder's Credit Information document located in **Appendix XX**

D. RESERVATION OF RIGHTS AND DISCLAIMERS

Ashland has prepared the information provided in this RFP to assist interested persons and entities in making a decision whether to respond with a proposal. Ashland reserves the right to modify, change, supplement or withdraw the RFP at its sole discretion. No part of this document or any other correspondence from Ashland, its employees, officers or consultants shall be taken as legal, financial or other advice, nor as establishing a contract or any contractual obligations. All communication between Bidders and Ashland shall be conducted in writing.

Ashland makes no representations or warranties regarding the completeness of the information contained within the RFP and does not purport that this RFP contains all of the information needed for Bidders to determine whether to submit a proposal. Neither Ashland nor its employees, officers or consultants will make, or will be deemed to have made, any current or future representation, promise or warranty, expressed or implied, as to the accuracy, reliability or completeness of the information contained within the RFP or any other information provided to Bidders.

Bidders who submit proposals do so without legal recourse against Ashland, or City Councilors, directors, management, employees, agents or contractors, due to Ashland's rejection, in whole or in part, of their proposal or for failure to execute any agreement with Ashland. Ashland shall not be liable to any Bidder or to any other party, in law or equity, for any reason whatsoever related to Ashland's acts or omissions arising out of, or in connection with, the RFP process.

Ashland reserves the right to reject, for any reason, any and/or all proposals. Ashland further reserves the right to waive any irregularity or technicality in proposals received, or to consider alternatives outside of this solicitation, at its sole discretion, to satisfy its capacity and energy needs. In addition, Ashland reserves the right, in its sole discretion, to modify or waive any of the criteria contained herein and/or the process described herein.

No Bidder will have any claim whatsoever against Ashland, its employees,

officers, or consultants arising from, in connection with, or in any way relating to this RFP. Without limiting the generality of the foregoing, each Bidder agrees, by and through its submission of a proposal, that rejection of a proposal will be without liability on the part of Ashland, its employees, officers, or consultants, nor shall a Bidder seek recourse of any kind against any of the foregoing on account of such rejection. The filing of a proposal shall constitute an agreement of the Bidder to each and all of these conditions. Each Bidder and recipient of this RFP is responsible for all costs incurred in evaluating, preparing and responding to this RFP. Any other costs incurred by any Bidder during negotiations are also the responsibility of the Bidder.

E. CONFIDENTIALITY AGREEMENT

Bidders will be required to execute a mutual confidentiality agreement prior to entering into final negotiations.

F. NOTICE OF INTENT TO BID

Bidders shall respond to this request via email to confirm their intentions to submit a proposal no later than XXXXX.

III. PROJECT INFORMATION

A. RESOURCE DESCRIPTION

Ashland is asking Bidders to propose to develop, design, procure, and construct a solar photovoltaic facility at the location described in more detail in **Appendix XX**. The Project shall generate at least 17,000 MWhs per year. The Bidder may propose either a fixed tilt or a single axis-tracking project based on the lowest levelized cost of energy over 25 years.

B. SITE DESCRIPTION

The City owned property known as the “Imperatrice Ranch” comprises 846 acres over multiple parcels. See **Appendix XX** for more property info.

C. POINT OF DELIVERY

1. Pacific Power BALANCING AUTHORITY: The Project will interconnect under the BPA Balancing Authority Small Generator Interconnection Process (SGIP) and any Pacific Power requirements.
2. ASHLAND MUNICIPAL ELECTRIC UTILITY SYSTEM: The specified point of connection will be at the Mountain Avenue substation and the Ashland substation. The Bidder will extend the 12.47kV distribution line from each of the substations using the attached engineering requirements and preliminary engineering design report. Pricing for the distribution line extension shall entail

substation connection through primary transformer connection at the Project site.

3. PACIFIC POWER INTERCONNECTION: Bidder may propose an interconnection to a Pacific Power line as an alternate proposal with the City acting as the leaseholder/landlord. This proposal must include any wheeling fees Pacific Power will charge the Project for delivery of power to Ashland. Provide supplemental documentation supporting such fees and process.

D. DRAWINGS AND DOCUMENTATION

1. GEOTECHNICAL REPORT: A geotechnical report on the property is located in **Appendix XX**.
2. PARCEL MAP: A parcel map for the proposed property that shows the property lines and associated easements that must be considered is located in **Appendix XX**.
3. HABITAT ASSESSMENT REPORT: A report for the entire property is located in **Appendix XX**.

4. TOPOGRAPHICAL MAP

E. WAGES

The Project will require Oregon State Prevailing Wages for the 2018 Bureau of Labor and Industries rates for Jackson County.

F. ENVIRONMENTAL ATTRIBUTES

Ashland will be the sole recipient of the environmental attributes of the Project.

IV. STATEMENT OF WORK

The Bidder shall be responsible for all aspects of the development, design, procurement, construction, and commissioning of the facility, including, but not limited to distribution infrastructure extension and obtaining all necessary easements/permits to construct the facility.

V. REQUEST FOR PROPOSAL CONTENT

Proposals for the “Ashland Solar RFP” must be submitted electronically by the due date. Each proposal must be contained in a single PDF file and formatted in the following manner. Additional supporting documentation may be included as appendices, where clear references are provided to the applicable section.

A. PROPOSAL FORMAT:

1. EXECUTIVE SUMMARY:

- a. The executive summary shall provide an overall description of the Project with key benefits to Ashland and other elements distinguishing the Bidder's proposal.

2. PRICING:

- a. Bidder shall provide the total system pricing with the following Excel file in **Appendix XX**.
- b. INTERCONNECTION UPGRADES: The Project will require interconnection upgrades and distribution line extensions to the project site. Bidders shall submit a line item for these costs separately.

3. EXPERIENCE AND QUALIFICATIONS:

- a. BIDDER EXPERIENCE: describe the pertinent experience to the proposed Project. Provide at least 3 customer references from completed projects.
- b. GENERATING FACILITIES: describe the number, size, and type of solar facilities placed in service.
- c. RESOURCE SUPPLY: describe the Bidder's ability to provide adequate resources to execute the Project, specifically pertaining to solar module, inverter, and racking procurement within the Project's development timeframe. Also describe any subcontracting agreements with quality control and assurance provided by Bidder.

4. TECHNICAL INFORMATION

- a. DRAWINGS: provide a one-line diagram and a conceptual drawing of the proposed array overlaid to the existing parcel.
- b. PRODUCTION: provide an excel-based third party production model such as PVsyst or equal, showing loss diagram with derate factors, and estimated yearly production in kWh for a 25-year project lifetime.
- c. PROJECTED PROJECT SCHEDULE: provide a schedule for the Project from contract execution to commercial operation with pertinent milestones. **Appendix XX**
- d. ENVIRONMENTAL COMPLIANCE PLAN: include a description of how the Project will comply with environmental laws and regulation. Provide a description of the applicable permits and assessments required, with proposed solutions.
- e. PROPOSED FACILITY EQUIPMENT: Bidder shall provide the proposed project components specifications in **Appendix XX**

Solar module manufacturers shall be “Tier 1” as defined by Bloomberg New Energy Finance. All manuals shall be provide as specified in **Appendix XX** at the completion of construction.

5. **WARRANTIES:**

- a. **PROPOSED EQUIPMENT WARRANTIES:** list the duration of the equipment warranty for modules, inverters, transformers, and racking hardware (use **Appendix XX, XX, XX, and XX**).
- b. **WORKMANSHIP:** list the duration of applicable workmanship warranties.
- c. **TOTAL SYSTEM WARRANTY:** if applicable, provide the system warranty and services provided by Bidder.
- d. **O&M SERVICES:** Bidder shall provide details on their O&M offering such as on-call, pro-active monitoring, preventative maintenance, vegetation management, panel cleaning, and associated costs.

VI. BID EVALUATION AND SELECTION

A. GENERAL

Ashland will evaluate proposals based on the reasonableness and timeliness of project execution and the lowest cost of energy.

B. PRICE FACTORS

Ashland will favor those projects proposals that provide the lowest levelized cost of energy for the lifetime of the system, estimated at 25 years.

C. NON-PRICE FACTORS

1. **EXPERIENCE**

- a. Project Development Experience
- b. Design/Build Experience
- c. Project Ownership/O&M Experience
- d. Financial Capability

2. **TECHNOLOGY**

- a. Equipment Quality
- b. Technical Feasibility
- c. Equipment Supply Control
- d. System Efficiency

VII. STATEMENT OF WORK

The following will be the responsibility of the Bidder.

- 1. **PERMITTING:** The Bidder will be responsible for all permitting, including but not limited to building permits, easements, conditional

use permits, environmental compliance permits, and State Historical Preservation permits.

2. **SITE MODIFICATIONS:** The Bidder will determine the extent of the site modifications necessary including but not limited to civil engineering, access roads, foundation design, site modifications, grading, and brush removal. Inclusions shall be listed in the RFP response.
3. **UTILITY INTERCONNECTION:** The Bidder will be responsible for the interconnection application with BPA and the City of Ashland, and all required utility interconnection infrastructure to interconnect the Project.
4. **EPC:** The Bidder will be responsible for all Engineering, Procurement, and Construction to deliver a fully operational PV system to Ashland.
5. **TELEMETRY:** The Bidder will be responsible for all required telemetering as required by the BPA SGIP process. Bidder may list the assumed costs for telemetry separately.
6. **FENCING:** The Bidder shall provide a minimum of 6' chain link fence around the perimeter of the Ashland Project.
7. **MONITORING:** an online dashboard for reading the Project's real time production shall be procured, installed, and commissioned by Bidder. The monitoring must be revenue grade and be displayed for a minimum of 10 years.
8. **COMMISSIONING:** Bidder must provide a 3RD party commissioning report listing compliance with contracts, manufacturer recommendations, and industry accepted minimum standards such as IEC 62446. Any non-compliant issues must be addressed prior to final payment. Bidder will provide a pre-commission testing procedure, commissioning start-up with performance capacity check and production metering and verification at 3, 6, or 12 months.

City of Ashland

Rate Design

5/15/2018

Utility Financial Solutions, LLC
185 Sun Meadow Court
Holland, MI USA 49424
(616) 393-9722
Fax (616) 393-9721
Email: mbeauchamp@ufsweb.com

Submitted Respectfully by:
Mark Beauchamp, CPA, CMA, MBA
President, Utility Financial Solutions



City of Ashland
Rate Design
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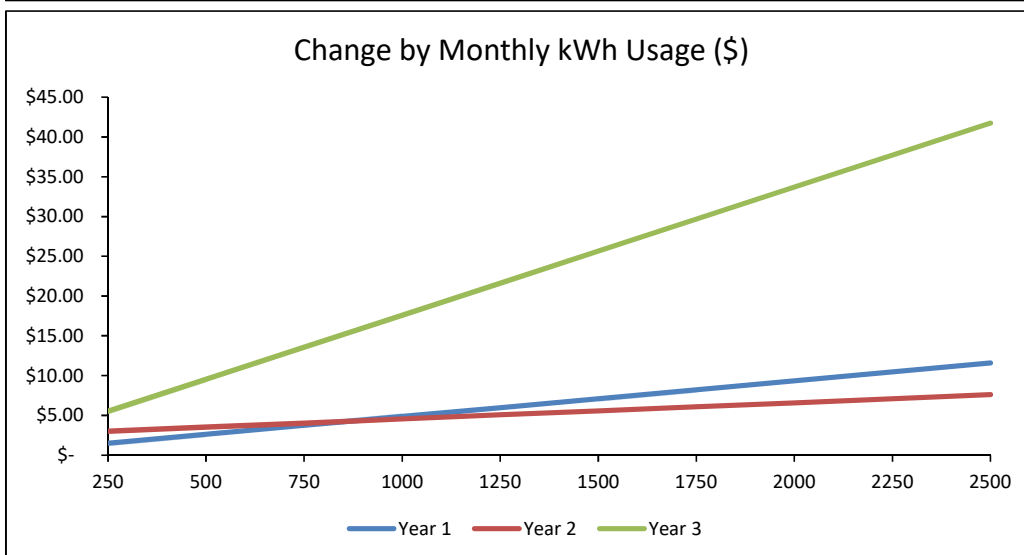
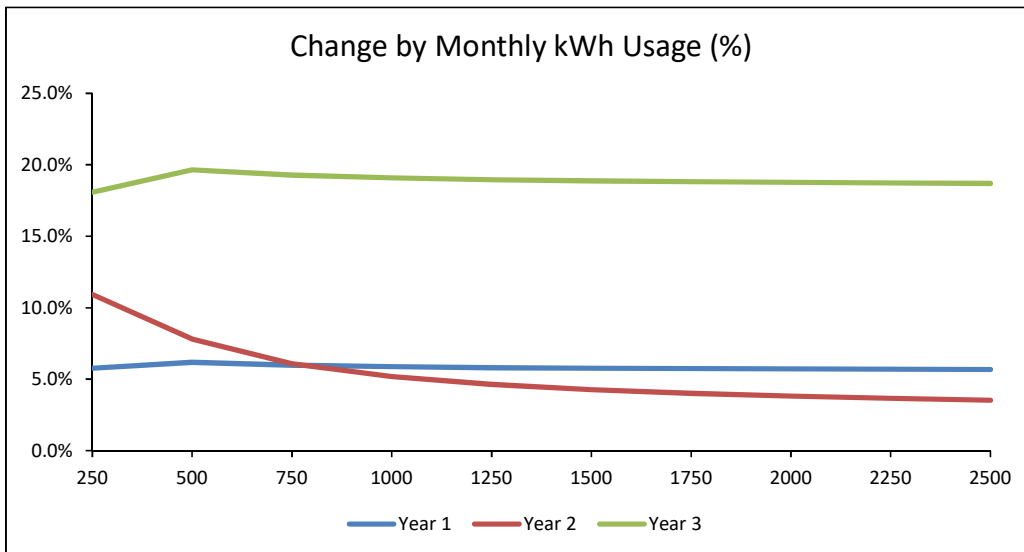
City of Ashland
Rate Design
Rate Design Summary

Customer Class	Projected Revenues Under Proposed Rates		Projected Revenues Under Proposed Rates		Projected Revenues Under Revised Rates		Original Year 3 %	Additional Solar %	Solar \$/Average Usage (month)
	Year 1	Change Year 1 %	Year 2	Change Year 2 %	Year 3	Year 3 %			
Residential Single-Phase	\$ 7,844,670	5.86%	\$ 8,329,088	6.18%	\$ 9,904,786	18.92%	4.71%	14.21%	\$ 9.61
Seasonal Residential Single	65,523	7.80%	69,196	5.61%	81,111	17.22%	3.22%	14.00%	\$ 14.41
Commercial Single/Telecomm	1,914,127	7.00%	1,996,434	4.30%	2,306,192	15.52%	2.75%	12.77%	\$ 18.52
Outdoor Lighting	21,061	6.89%	21,848	3.74%	25,221	15.44%	2.93%	12.51%	\$ 2.62
Commercial Service Three Phase	3,358,358	6.00%	3,492,693	4.00%	4,088,978	17.07%	2.50%	14.57%	\$ 124.38
Govt/Muni Single Phase	242,597	8.90%	257,883	6.30%	296,636	15.03%	3.90%	11.13%	\$ 19.29
Govt/Muni Three Phase	968,159	5.50%	1,004,465	3.75%	1,164,774	15.96%	2.25%	13.71%	\$ 260.81
Governmental Large Service	926,259	5.49%	960,993	3.75%	1,142,560	18.89%	2.25%	16.64%	\$ 6,664
Totals	\$ 15,340,754	6.04%	\$ 16,132,599	5.16%	\$ 19,010,258	17.84%	3.67%	14.17%	

Implemented
Approved

City of Ashland
Rate Design
Residential Single-Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
All Customers	\$ 9.62	\$ 10.00	\$ 12.50	\$ 14.00
Energy Charge:				
Block 1 (0 - 500 kWh)	\$ 0.06563	\$ 0.07011	\$ 0.07216	\$ 0.07456
Block 2 (501 - 5,000 kWh)	\$ 0.08073	\$ 0.08521	\$ 0.08726	\$ 0.08966
Block 3 (Excess)	\$ 0.08073	\$ 0.12000	\$ 0.12500	\$ 0.12750
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 7,410,275	\$ 7,844,670	\$ 8,329,088	\$ 9,904,786
Revenue Goal		\$ 7,844,670	\$ 8,329,088	\$ 9,904,786
Change from Previous		5.9%	6.2%	18.9%
Cummulative Change		5.9%	12.4%	33.7%



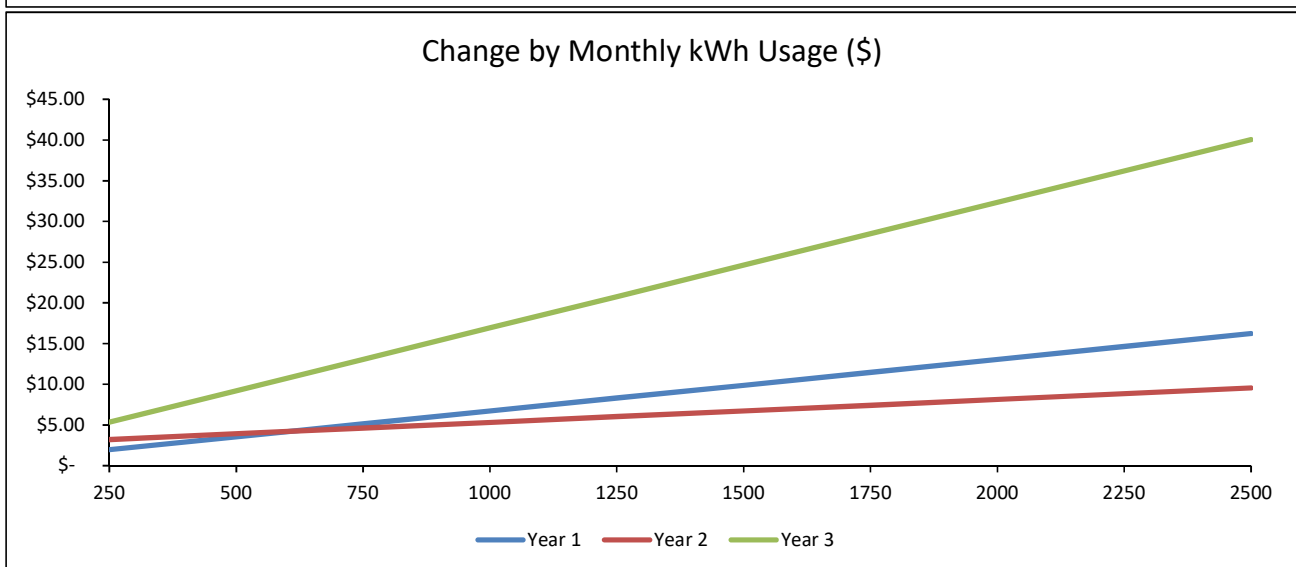
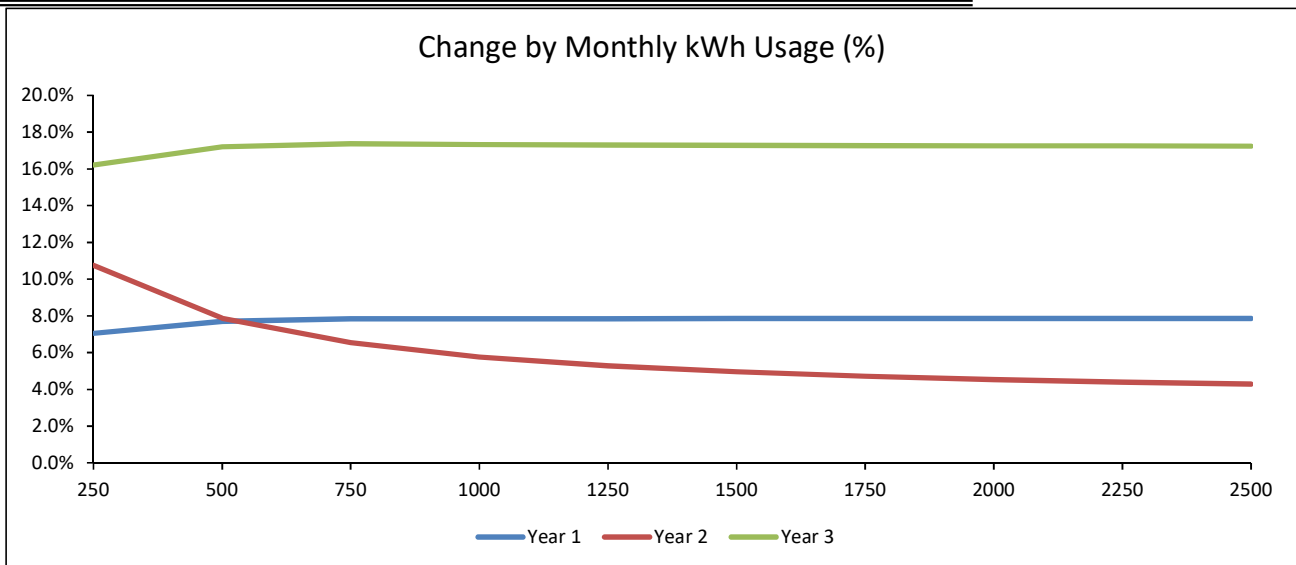
City of Ashland
Rate Design
Residential Single-Phase

Rate Change Effect by Usage (%)				
Usage	Year 1	Year 2	Year 3	
250	5.8%	10.9%	18.1%	
500	6.2%	7.8%	19.7%	
750	6.0%	6.1%	19.3%	
1000	5.9%	5.2%	19.1%	
1250	5.8%	4.6%	19.0%	
1500	5.8%	4.3%	18.9%	
1750	5.7%	4.0%	18.8%	
2000	5.7%	3.8%	18.8%	
2250	5.7%	3.7%	18.7%	
2500	5.7%	3.5%	18.7%	

Rate Change Effect by Usage (\$)				
Usage	Year 1	Year 2	Year 3	
250	\$ 1.50	\$ 3.01	\$ 5.52	
500	\$ 2.62	\$ 3.52	\$ 9.55	
750	\$ 3.74	\$ 4.03	\$ 13.57	
1000	\$ 4.86	\$ 4.54	\$ 17.59	
1250	\$ 5.99	\$ 5.05	\$ 21.62	
1500	\$ 7.11	\$ 5.57	\$ 25.64	
1750	\$ 8.23	\$ 6.08	\$ 29.66	
2000	\$ 9.35	\$ 6.59	\$ 33.69	
2250	\$ 10.47	\$ 7.10	\$ 37.71	
2500	\$ 11.59	\$ 7.61	\$ 41.74	

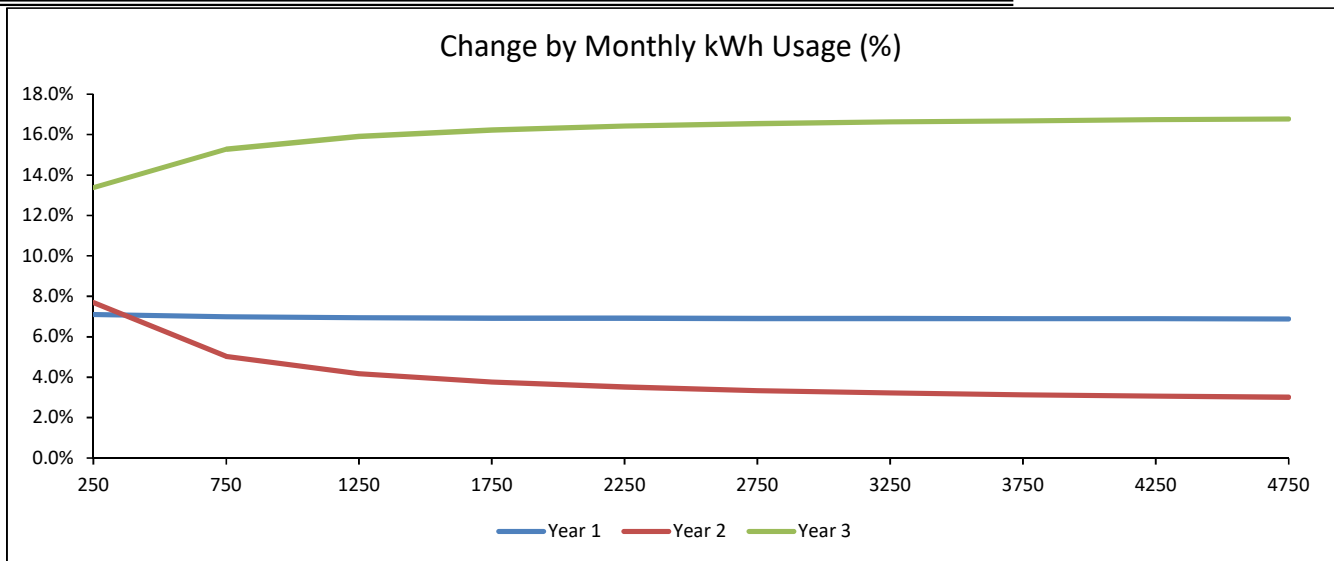
City of Ashland
Rate Design
Seasonal Residential Single

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
All Customers	\$ 9.62	\$ 10.00	\$ 12.50	\$ 14.00
Energy Charge:				
Block 1 (0 - 600 kWh)	\$ 0.07293	\$ 0.07927	\$ 0.08209	\$ 0.08381
Block 2 (601 - 5,000 kWh)	\$ 0.08062	\$ 0.08696	\$ 0.08978	\$ 0.09150
Block 3 (Excess)	\$ 0.08062	\$ 0.12000	\$ 0.12500	\$ 0.12750
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 60,785	\$ 65,523	\$ 69,196	\$ 81,111
Change from Previous		7.8%	5.6%	17.2%



City of Ashland
Rate Design
Commercial Single/Telecomm

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less/Power Supply	\$ 17.23	\$ 18.50	\$ 21.00	\$ 23.00
Over 30kW	\$ 64.67	\$ 64.67	\$ 64.67	\$ 64.67
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.07804	\$ 0.08340	\$ 0.08550	\$ 0.08648
Block 2 (3001 - 20,000 kWh)	\$ 0.07829	\$ 0.08365	\$ 0.08575	\$ 0.08673
Block 3 (Excess)	\$ 0.07866	\$ 0.08402	\$ 0.08612	\$ 0.08710
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.12	\$ 4.75	\$ 5.50	\$ 6.25
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 1,788,904	\$ 1,914,127	\$ 1,996,434	\$ 2,306,192
Change from Previous		7.0%	4.3%	15.5%

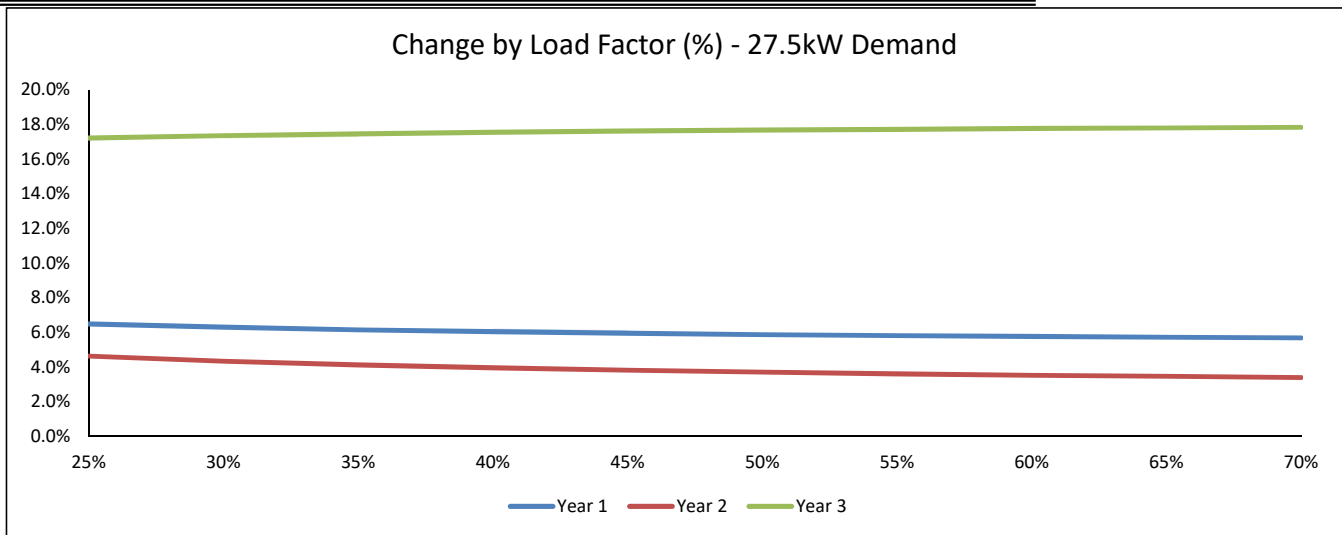


City of Ashland
Rate Design
Outdoor Lighting

Current Rates	Current	Year 1	Year 2	Year 3
Monthly Light Charge:				
Lamp				
HPS 5800 Non Res	\$ 21.69	\$ 23.15	\$ 23.80	\$ 24.50
HPS 22000 Non Res	\$ 31.31	\$ 33.40	\$ 34.65	\$ 35.65
HPS 50000 Non Res	\$ 50.08	\$ 53.55	\$ 55.55	\$ 57.15
HPS 5800 Res	\$ 16.68	\$ 17.85	\$ 18.60	\$ 19.15
HPS 22000 Res	\$ 24.09	\$ 25.70	\$ 26.50	\$ 27.25
HPS 50000 Res	\$ 38.53	\$ 41.20	\$ 42.75	\$ 44.00
Wood Pole	\$ 1.89	\$ 2.00	\$ 2.10	\$ 2.15
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenues from Current Rates	\$ 19,703	\$ 21,061	\$ 21,848	\$ 25,221
Change from Previous		6.89%	3.74%	15.44%

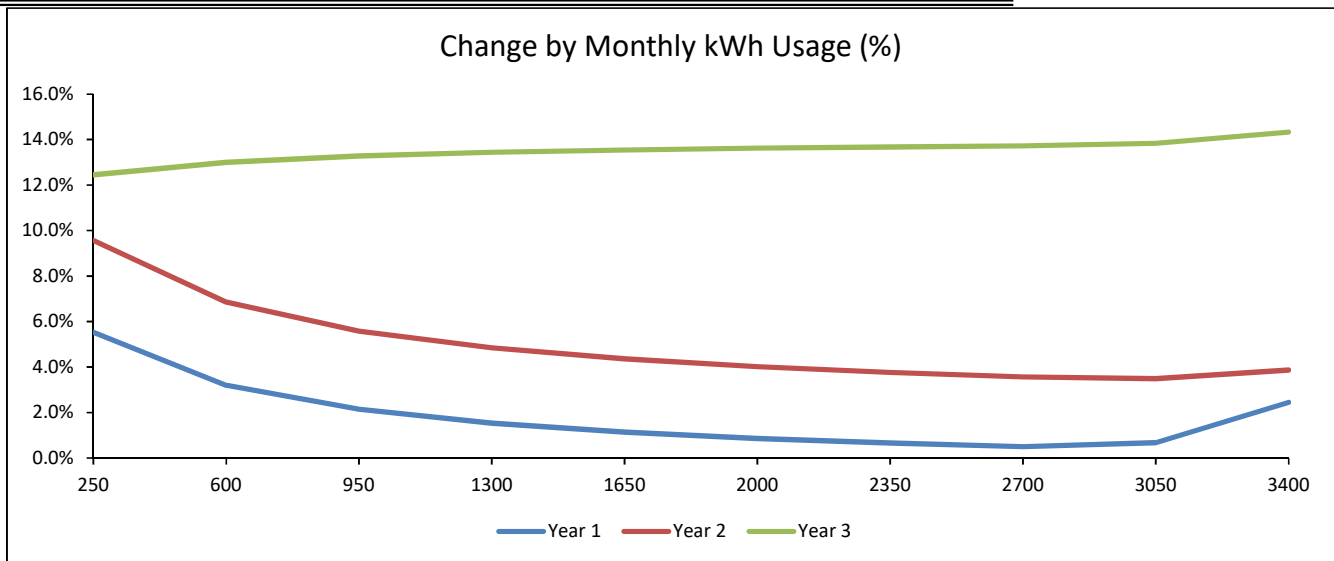
City of Ashland
Rate Design
Commercial Service Three Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less	\$ 34.47	\$ 37.00	\$ 40.00	\$ 45.00
Over 30kW	\$ 112.10	\$ 112.10	\$ 112.10	\$ 112.10
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.07145	\$ 0.07514	\$ 0.07706	\$ 0.07754
Block 2 (3001 - 17,000 kWh)	\$ 0.07193	\$ 0.07562	\$ 0.07754	\$ 0.07802
Block 3 (Excess)	\$ 0.07212	\$ 0.07581	\$ 0.07773	\$ 0.07821
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.12	\$ 4.75	\$ 5.50	\$ 6.25
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 3,168,263	\$ 3,358,358	\$ 3,492,693	\$ 4,088,978
Change from Previous		6.0%	4.0%	17.1%



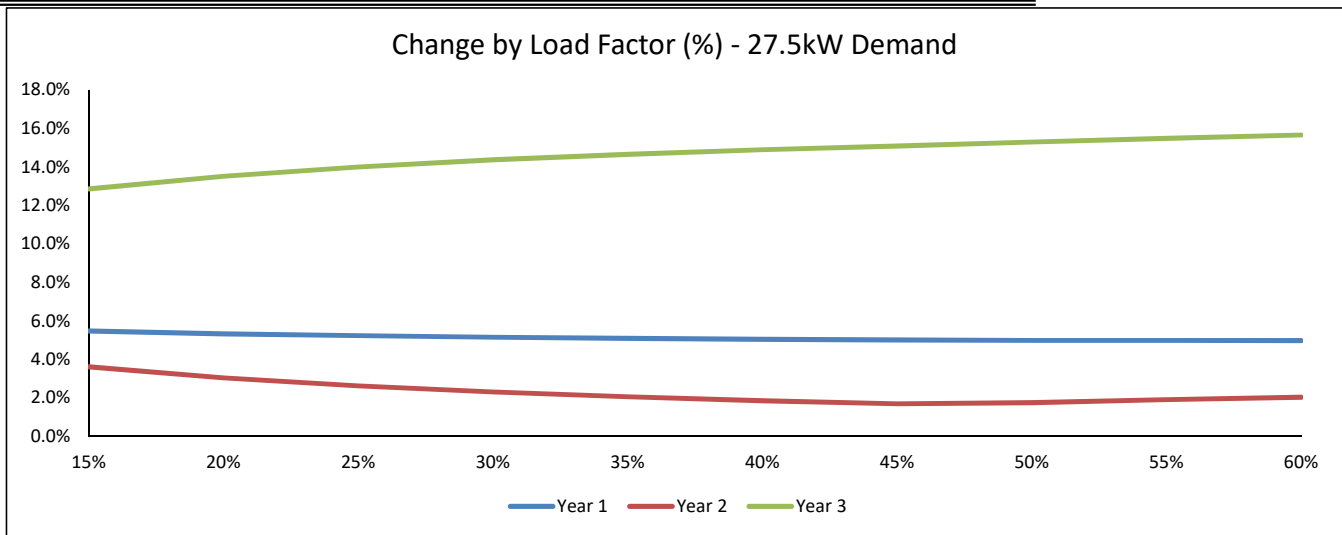
City of Ashland
Rate Design
Govt/Muni Single Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less/Power Supply	\$ 17.23	\$ 18.50	\$ 21.00	\$ 23.00
Over 30kW	\$ 64.67	\$ 64.67	\$ 64.67	\$ 64.67
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.09437	\$ 0.09371	\$ 0.09562	\$ 0.09538
Block 2 (3001 - 20,000 kWh)	\$ 0.07077	\$ 0.08871	\$ 0.09562	\$ 0.10038
Block 3 (Excess)	\$ 0.06632	\$ 0.08871	\$ 0.09562	\$ 0.10038
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.19	\$ 4.75	\$ 5.50	\$ 6.25
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 222,773	\$ 242,597	\$ 257,883	\$ 296,636
Change from Previous		8.9%	6.3%	15.0%



City of Ashland
Rate Design
Govt/Muni Three Phase

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
30kw or Less	\$ 34.47	\$ 37.00	\$ 40.00	\$ 45.00
Over 30kW	\$ 112.10	\$ 112.10	\$ 112.10	\$ 112.10
Energy Charge:				
Block 1 (0 - 3,000 kWh)	\$ 0.10082	\$ 0.10433	\$ 0.10433	\$ 0.10433
Block 2 (3001 - 20,000 kWh)	\$ 0.07645	\$ 0.07996	\$ 0.07996	\$ 0.07996
Block 3 (Excess)	\$ 0.07166	\$ 0.07517	\$ 0.07803	\$ 0.07837
Demand Charge				
Block 1 (0 - 15 kW)	\$ -	\$ -	\$ -	\$ -
Block 2 (Excess)	\$ 4.19	\$ 4.75	\$ 5.50	\$ 6.25
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 917,686	\$ 968,159	\$ 1,004,465	\$ 1,164,774
Change from Previous		5.50%	3.75%	15.96%



City of Ashland
Rate Design
Governmental Large Service

Rates	Current	Year 1	Year 2	Year 3
Monthly Facilities Charge:				
Monthly Charge	\$ 2,639.36	\$ 2,639.36	\$ 2,639.36	\$ 2,639.36
Energy Charge:				
All Energy	\$ 0.05766	\$ 0.05912	\$ 0.05963	\$ 0.05902
Demand Charge				
All Demand	\$ 4.92	\$ 6.00	\$ 7.00	\$ 8.00
Solar Implementation				
Additional Power Costs	\$ -	\$ -	\$ -	\$ 0.01245
Additional City Payment	\$ -	\$ -	\$ -	\$ 0.00125
Solar Charge	\$ -	\$ -	\$ -	\$ 0.01370
Revenue from Rate	\$ 878,093	\$ 926,259	\$ 960,993	\$ 1,142,560
Change from Previous		5.49%	3.75%	18.89%

