Council Business Meeting

April 16, 2019

Agenda Item	Renewable Energy Development Grant Application Request							
From	Adam Hanks Assistant to the City Administrator							
Contact	Adam.hanks@ashland.or.us							

SUMMARY

Staff is requesting Council approval, per Administrative Policy 11-01.04, to apply to the Oregon Department of Energy (ODOE) for a renewable energy development grant. The potential project is a solar system installation on several City facilities at the Service Center at 90 N Mountain Avenue, along with an appropriately sized battery to assist in energy resilience for this key asset in community preparedness and emergency response. The application is due April 22, 2019 and includes a required application fee of \$500.

POLICIES, PLANS & GOALS SUPPORTED

Not Applicable

PREVIOUS COUNCIL ACTION

The project staff anticipates submitting in the grant application is in alignment with the list of potential projects that would assist in meeting the "10 by 20" Ordinance as discussed many times in previous Council study sessions and business meetings, most recently at the February 19, 2019 Business meeting.

BACKGROUND AND ADDITIONAL INFORMATION

This application triggers the grant request Administrative Policy by being both over \$10,000 and requiring a City match, as the grant would fund a maximum of 35% of the overall project cost. Consistent with this policy, the following information is provided to Council to assist in evaluating this grant submittal request:

- 1. The source of the grant is the Oregon Department of Energy
- 2. The project is a solar and battery system installation at the Service Center at 90 N Mountain Avenue.
- 3. The timeframe of the project would likely be initiated and completed within fiscal year 2020.
- 4. This project would be jointly managed by the Administration, Electric and Public Works Departments, with the Public Works Department likely providing lead project management services for the internal team.
- 5. The 65 percent City match for the project is anticipated to not be borne directly by the City, but rather done through the purchase of the energy generated by the solar system (Power Purchase Agreement). There will likely be remaining costs associated with the battery portion of the system and it is not yet known whether other grant funds or other external funding would be available for this use.
- 6. The anticipated impact on future budgets would result from the likely higher than existing municipal customer electric rates (\$0.095 per kwh or just over 9 cents) of the purchase price of the solar energy generated. The exact amount would not be known until the project was put out to bid and proposals received and reviewed.
- 7. The grant does not contain restraints, stipulations or requirements that pose any long term commitment or responsibility to the City other than compliance with the PPA for the purchase of the energy generated and to maintain the battery system for the life of the solar system as defined in the final grant approval should the award be granted.



FISCAL IMPACTS

Staff acknowledges that a full understanding of the final fiscal impacts is not known at this time. The objective of this request is to move forward and complete the project structure in sufficient detail to submit a competitive application that allows staff to develop options for Council to address the remaining 65% match requirement to make the project a reality. If the grant is awarded, a complete project description and financial plan would be submitted to Council prior to the acceptance of the award and prior to the development of the final project bid release documents.

STAFF RECOMMENDATION

Staff recommends Council approval of the grant application request with the understanding that further project details and financial plans will be developed and presented to Council before the determination is made to accept the grant, should it be awarded.

ACTIONS, OPTIONS & POTENTIAL MOTIONS

- 1) I move to approve the staff request to submit a grant application to the Oregon Department of Energy for a potential solar and battery system project at the City's Service Center at 90 North Mountain with the understanding that staff will bring this item back to Council prior to acceptance of the grant if awarded.
- 2) I move to direct staff to continue developing the project concept but not submit the application at this time so as to provide Council with additional information prior to seeking grant funds for this or similar projects.

REFERENCES & ATTACHMENTS

Attachment 1: ODOE Grant Application Packet

Attachment 2: City of Ashland Administrative Policy 11-01.04 – Grant Application Approval Process February 19, 2019 Council Meeting Packet – 10x20 Progress and Findings





Oregon Department of Energy Opportunity Announcement for:

Renewable Energy Development Grants Opportunity Announcement No. 19-001

Contact

	Oregon Department of Energy		
Address:	550 Capitol St NE, 1 st Floor		
	Salem, OR 97301		
E-mail:	energy.incentives@oregon.gov		
E-mail Subject Line:	RED Grant		

Schedule of Events

Event	Date
OA Issued	March 12, 2019
Opening of Opportunity Period	March 12, 2019
Questions Due	March 25, 2019
Questions and Answers Posted	April 1, 2019
Closing of Opportunity Period (Applications Due)	April 22, 2019
Completeness Review (approx.)	April 29, 2019
Competitive Review (approx.)	May 20, 2019
Technical Review (approx.)	May 27, 2019
Award Notification (approx.)	July 22, 2019



Oregon Department of Energy offers energy incentives, grants, loans, and technical services

In addition to Renewable Energy Development Grants, the Oregon Department of Energy (Department) offers technical services for a variety of energy projects. Learn more about the State Energy Efficiency Design program and the Energy Efficient Schools program by visiting the Department at the following links:

- State Energy Efficiency Design (SEED)
 - o www.oregon.gov/energy/energy-oregon/Pages/SEED-Program-Guidelines.aspx
- Energy Efficient Schools
 - o www.oregon.gov/energy/energy-oregon/Pages/Schools-Program.aspx

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Section 1: Purpose and General Information

1.1 Introduction

ORS 469B.250 through 469B.265 authorize the Oregon Department of Energy (Department) to provide grants for renewable energy production systems. The statutes allow the Department to establish standards and criteria to allocate the available grant funds.

The purpose of this Renewable Energy Development (RED) grant opportunity announcement is to create a competitive review process that follows the requirements of the statutes and rules under which the RED grant program is administered to determine which systems using renewable energy resources to produce electricity will receive a RED grant. The rules adopted by the Department to administer this program are found at OAR 330-200.

This opportunity announcement offers two distinct paths for systems based on their nameplate capacity determined by the continuous, or nominal, output power rating of the inverter or inverters, measured in Alternating Current (AC). For each path, the Department will use the same evaluation criteria listed in section 3.3.

Path one is open to all renewable energy production systems with a nameplate capacity of 300 kW_{AC} or less. Path two is open to all renewable energy production systems with a nameplate capacity greater than 300 kW_{AC} .

1.2 Grant Availability

For this opportunity announcement, the Department has **approximately \$2,750,000** in grant **funds** available for renewable energy production systems.

The Department has approximately \$1,500,000 in grant funds available for all renewable energy production systems with a nameplate capacity of 300 kW_{AC} or less.

The Department has approximately \$1,250,000 in grant funds available for all renewable energy production systems with a nameplate capacity greater than 300 kW_{AC} .

1.3 Eligibility

Subject to compliance with the other application requirements, the Department's competitive review process is open to renewable energy production systems that use biomass, solar, geothermal, hydroelectric, wind, landfill gas, biogas or wave, tidal or ocean thermal energy technology to produce electrical energy. A solar technology system is a mechanism or series of mechanisms, including photovoltaic systems, that uses solar radiation to generate electrical energy.

To be eligible for a grant, the renewable energy production system and the applicant must meet the requirements of statutes, rule, and this opportunity announcement. These requirements include:

- 1. The applicant will be the owner, contract purchaser, or lessee of the system at the time of installation or construction of the proposed system;
- 2. The applicant is a trade, business, or rental property owner with a business site in Oregon, or is an Oregon nonprofit organization, tribe or public entity;
- 3. The system does not exceed 35 megawatts of nameplate capacity; and
- 4. The system is located in Oregon.

A renewable energy production system must meet the definition in ORS 469B.250. Grants may not exceed 35 percent of the cost of the project and may not exceed \$250,000 per system.

The applicant may not receive funding for the system from the Feed-In Tariff program under ORS 757.365.

Section 2: Application Requirements & Process

2.1 Submission of Applications

The Department must receive the RED grant application prior to the installation or construction of the system. The applicant should submit the Department's application form with all the requested information.

A complete application includes, at a minimum:

- An application form with all required information completed, including a signed system owner statement.
- Payment of the application fee via check or credit card (\$500).
- The following supplemental documents attached:
 - Energy engineering calculations
 - Energy code compliance forms
 - Project cost estimates
 - Service life summary
 - Lifetime energy savings calculations
 - Lifetime project cost calculations
 - Proof of funding/financial documentation
 - Project construction plan
- A description that shows the system meets the definition of a renewable energy production system that includes the following:
 - o Information demonstrating how the system will be feasible, including technological, operation, schedule, and resource factors.

- Projected amount of net energy in kWh generated per year. Indicate annual energy generated minus parasitic load to determine net energy generated. Indicate nameplate capacity in kW_{AC}.
- How long the system will be in service and information on how the system will operate for a minimum of five years.
- A description of the environmental and community impacts and benefits of the system.
- A description of ownership structure
- Specifications and manufacturers information for selected technology and all major system equipment.
- A description of utility interconnection, system upgrades, and control and protection equipment to be installed.
- A resource assessment demonstrating adequate resource supply for the proposed system operations. The resource assessment must describe the type of resource available, explain how the resource was evaluated, and describe how the system will access the resource.
- A System Management Plan See OAR 330-200-0030(4)(m)
- If a feasibility study or a third-party evaluation or engineering review has been completed, copies of these reports.
- The construction schedule showing the estimated time to begin construction of the renewable energy system, which must be within 12 months of award.
- Evidence that the application is being submitted prior to the installation or construction of the system.
- Documents showing a site address located in Oregon.
- Three (3) copies of the application packet. Applications that do not contain three (3) copies will be considered incomplete.

Applications and any additional materials must be submitted on $8\frac{1}{2}$ x 11" paper and stapled or clipped. Please do not submit applications in binders, dividers, or other bound forms.

The Department must receive applications no later than the due date on the cover of this opportunity announcement and must be delivered to the following address:

Oregon Department of Energy 550 Capitol St NE, 1st Floor Salem, OR 97301

The Department will not accept late, faxed, or electronically-transmitted applications. Applications that are submitted improperly will be rejected and applicants will have to reapply during an appropriate opportunity period to be considered.

The Department will not process applications received outside of the opportunity period dates listed on the cover of this opportunity announcement.

On the application form, the project owner must list a person as the responsible party. The Department will contact this designated responsible party with technical questions; it is the job of the responsible party to coordinate and submit responses to the Department. This person does not have to be the project owner, but is assigned to represent the project owner. All Department correspondence regarding the application and project will also be sent to the project owner.

2.2 Waiver of the System Start Date

The Department director may allow an applicant to apply after the start of installation or construction of the system, if the director finds that applying before the start of installation or construction is inappropriate due to special circumstances; and the system would otherwise qualify. Failing to submit an application or not being selected for a grant or tax credit under this or prior Department programs do not constitute special circumstances.

For the waiver to be considered, a written waiver request must be submitted with the grant application. The Department's review committee will review and make a recommendation to the director as to whether to grant or deny the waiver.

2.3 Application Withdrawal

Applicants may withdraw their applications by submitting a written notice to the Department. The Department will not refund the \$500 application fee nor apply it to future applications. Applicants will receive notification confirming the withdrawal.

2.4 Submitting Multiple Applications

The Department will determine whether the system is a single renewable energy production system or part of a larger system in combination with other applications. The Department considers a single renewable production system as one or more electrical energy production devices that are applied for within the same opportunity announcement, use the same renewable resource and are owned or controlled by the same person. See OAR 330-200-0070(5) for further details.

If an applicant submits multiple applications for a single renewable production system, the Department will review and score each application. If one or more of the applications is successful, only the highest ranked application will be eligible to move forward in the process. Each application must be accompanied by the nonrefundable application fee.

2.5 Other Government Incentives or Grants

In the application, an applicant must indicate other government incentives or grants for which the applicant has applied, related to the same system. The amount of any potential RED grant will be reduced if in combination with other government incentives or grants, the amount exceeds 75 percent of the total system cost. If not indicated, the Department will assume all available government incentives and grants will be received for the system and will adjust any potential grant award accordingly. The amount of the RED grant when combined with all other incentives cannot exceed total project costs.

2.6 Questions

Questions, including requests for explanations of the meaning or interpretation of provisions of this opportunity announcement, must be submitted via email to and received by the due date for questions set forth on the cover of this opportunity announcement. To help ensure questions are answered and responses are posted appropriately, please identify "RED" in your subject line. Answers to questions submitted will be posted online for access by all applicants every few days until just before the application due date.

Section 3: Review Process

3.1 Overview

The Department will conduct a review of the applications received in response to this opportunity announcement. The Department will evaluate all applications for completeness. The Department will conduct a competitiveness review of all complete applications and, based on the competitive review results, certain applications will advance to technical review.

Any attempt by an applicant to improperly influence the review process will result in application denial. All comments and questions should be submitted via email to energy.incentives@oregon.gov.

3.2 Completeness Review (pass/fail)

The Department staff will review all applications on a pass/fail basis and determine if each application meets the minimum requirements described in section 2.1 of the opportunity announcement. Applicant's failure to comply with the instructions or failure to submit a complete application may result in the application being found incomplete and rejected. Only those applications that meet the minimum requirements will be considered for further review. If the applicant is relying on information in attachments, the information in the attachment should be readily identifiable with explicit references noted on the application form.

The Department will consider applications incomplete unless the \$500 fee is received with the application. If the payment is unable to be processed, the Department will consider the application incomplete and will not process the application.

Project construction must start within 12 months of award. To demonstrate an estimated construction start date within 12 months of award, an applicant must provide a construction schedule showing the anticipated start and completion date. It may be helpful to include what steps have been undertaken to plan for or begin construction. This may include a list of permits with dates received or other evidence indicating that the project will begin construction within 12 months of the award.

If the Department finds that the application is complete, the Department will notify the applicant that the application will move into the competitive review process. The Department will not process incomplete applications, and will provide written notification to the applicant. If a system is submitted on an application that is found incomplete, the project owner may apply in a future opportunity announcement, if the project would otherwise be eligible.

3.3 Competitive Review (scored)

Each member of the Department's review committee will review and score all complete applications based on the criteria listed below. Renewable energy production systems with a nameplate capacity of 300 kW $_{AC}$ or less will be scored separately from the renewable energy production systems with a nameplate capacity of greater than 300 kW $_{AC}$. All systems must meet the requirements listed in OAR 330-200-0000 through 330-200-0150.

Competitive Review Criteria:	Points
Example 19 Points will be awarded by examining a number of factors	25

Feasibility of the system: Points will be awarded by examining a number of factors,	25
including technological, operational, schedule, and resource feasibility. Reviewers will also	
award points if synergies exist between the system and applicant's business. Note: There	
should be adequate and appropriate data to demonstrate the amount of renewable	
resource available, including the type, quantity, quality, and seasonality of the resource. This	
information should be presented in a clear and orderly fashion to demonstrate that the	
project is feasible.	
Net energy generated per grant amount requested: Net generation occurs when, over the	20
course of the relevant period, the system generates more electrical power than is required	
to run the system. Higher net generation yields are more desirable.	
Strength of the financial plan: Financial statements will form the basis for points in this	20
area. In the application, include the proposed balance sheet at system commissioning along	
with the estimated balance sheet, cash flow statement, and income statement for five years.	
Financial viability will be determined by evaluating the total estimated cost, the financing	
structure and projected cash flow and profitability.	
Location of the system: Points will be awarded for systems that will be sited in low-density	15
areas in the eastern part of the state and those with high unemployment rates. This	
recognizes the importance of energy incentives in stimulating the economy. The Department	
will use current data from the Oregon Employment Department and the U.S. Census Bureau	
in calculating these points.	
Technological/resource diversity: Points will be awarded by comparing all proposals	10
received during an opportunity period. This will weigh the proposed technology and	
resources to be used against other proposals, with the goal to diversify the types of systems	
receiving grants.	
Number of jobs created and sustained by the system per grant amount requested: Points	10
will be awarded based on the number of full-time equivalent positions created and	
sustained due to the system. Applicants should provide the number of hours, which	
Department staff will convert to full-time equivalent positions for the purpose of rating the	
applications. This takes into consideration only the jobs directly associated with the	1

construction, operation, and maintenance of the system. Operations and maintenance	
positions should be clearly identified, even if the positions currently exist and are being	
reassigned to maintain the new system.	
Provides Electricity Resiliency: Points will be awarded for renewable systems that are	10
capable of supplying electricity when the larger grid is unavailable due to extreme weather	
or other emergency situations. Systems must be designed with resiliency in mind and	
therefore will have automated controls that allow the system to operate completely isolated	
from the grid. The renewable system may be combined with energy storage such as	
batteries. Higher points will be awarded if the system is either available directly to the	
public or available through public emergency responders.	
Demonstrates Community Benefits: Points will be awarded for systems that are structured	5
to provide community ownership opportunities or demonstrate creative community	
financing models or convey other benefits to members of the local community. Other	
benefits may include: benefits to the local community such as providing energy for a	
community facility or the project provides revenues back to the community.	

Total: 115

Applications will be ranked based on the competitive review scores.

The Department will use the applicant's financial data and other information from the application to determine the internal rate of return (IRR) of the system. On the application form, the applicant will provide annual expenses (include maintenance and operations), revenue, and resulting cash flows for the first ten years of system operation. The Department will use this information in its calculations. Systems with higher IRR percentages are more desirable and the IRR will be considered in the evaluation of the strength of the financial plan and may be considered in the evaluation of the feasibility of the system.

The Department will notify all applicants of the competitive review's outcome in writing.

Only those applications selected in the competitive review, based on their score, will be considered for technical review. Applicants selected for technical review will be required to pay a technical review fee prior to the review. The fee amount is equal to the qualifying system cost multiplied by 1.25 percent (0.0125) up to \$8,929. If the applicant does not submit the required payment to the Department within 21 calendar days of notification of the advancement to technical review, the Department may deny the application.

The Department may place projects that do not advance to the technical review on a supplemental list, pending the technical reviews of selected projects. The Department will retain the supplemental list until the performance agreements for selected projects are signed. Projects on the supplemental list will not be retained for competition in future opportunity announcements.

Projects not selected to move into technical review may be eligible to apply again in response to a future opportunity announcement. The project must not have begun installation or construction, and a new application and fee will be required. The Department will not apply fees

or applications submitted in response to a previous opportunity announcement to future opportunity announcements.

3.4 Technical Review

The Department will review the information provided in the application against industry standards to determine whether the system is technically feasible, should operate in accordance with the representations made by the applicant, and meets standards described in OAR 330-200-0000 through OAR 330-200-0150.

If an application does not include all the information needed to complete the technical review, the Department may notify the applicant in writing, requesting additional information. If the Department does not receive the requested information within 30 calendar days, the Department may deny the application.

The Department will notify the applicant in writing if the application fails technical review and causes the Department to deny the application. If the technical review determines that information submitted by the applicant during the competitive process was inaccurate, the Department may deny the application.

If an application fails the technical review, the director may choose another application from the list of ranked applications on the supplemental list. That application will be required to pay the technical review fee prior to the review.

3.5 Offer of Performance Agreement

After satisfying the technical review, applications may be offered a performance agreement. The grant amount offered may be less than requested. The Department will communicate to the system owner the conditions surrounding the offer of a performance agreement. Applicants will have 30 calendar days to respond in writing to the offer.

The performance agreement will include the terms provided in OAR 330-200-0080, and may include additional terms, such as reporting frequency. In accordance with OAR 330-200-0080 (6), failure to agree to the terms of a performance agreement will result in the Department rejecting the grant application.

3.6 Notification

Once the Department has confirmed allocation of the available grants, the remaining applicants will be notified of the outcome. After that time, the Department will no longer retain the supplemental list of applicants for that opportunity announcement or for any future opportunity announcements.

Section 4: Grant Process and Payment

4.1 Reporting

Once a performance agreement is executed, the grantee must submit quarterly reports to the Department on the status of the construction or installation of the system. The quarterly reporting requirement begins the first quarter following the execution of the agreement and each quarter thereafter until the system is complete. Reports are due by the 15th day of the month immediately following the end of the quarter. When the system is complete and operational, the grantee must submit a final report to the Department prior to disbursement of the grant. A grantee must also submit operational reports every year for five (5) years after the system is complete. The performance agreement will provide details about these reports.

To demonstrate beginning construction or installation, the grantee must submit the required reports with documents demonstrating system milestones, as specified in the performance agreement. See attached Exhibit A for examples of what constitutes as beginning construction.

4.2 Amendments

Renewable energy production system applications and performance agreements may be amended only as provided under OAR 330-200-0090. The grantee must submit a written amendment request to the director to amend a performance agreement or change any aspect of the renewable energy production system. Amendment requests must include payment of a \$300 fee. The Department may accept non-substantive changes, such as change of responsible party information, without payment of the fee. See OAR 330-200-0090 for further information.

Prior to approval of an amendment, the grantee must demonstrate that the system, with the proposed change, would continue to be technically feasible, would operate as represented, and would remain in operation for at least five (5) years. The grantee has the responsibility to provide complete technical documentation that will support a case for the proposed amendment. The Department may deny amendments submitted without such justification.

The Department will evaluate amendments to determine if the change would have affected the outcome of the competitive review, which may result in denial of the amendment request.

4.3 Disbursing Grant Award

When the system is complete, operational, and meets all conditions of the performance agreement, a grantee should submit the final report. Once the Department has received and approved the final report, the Department will disburse the grant as specified in the performance agreement. In the final report, the applicant must:

- Demonstrate that the total project costs for purchase and installation or construction of the energy conservation project were paid in full.
- Document total project cost by:
 - Having a certified public accountant attest to the total project cost if the project cost is \$50,000 or more. The certified public accountant cannot be the project owner or permanently employed by the project owner; or

- If the total project cost is less than \$50,000, the applicant must submit copies of itemized invoices and/or receipts for the project. All invoices and receipts for proof of payment must be marked "paid" and may include canceled checks, credit card statements, binding contracts, and agreements.
- Include information regarding incentives applied for or received in connection with the project.

The amount of any potential RED grant will be reduced if, in combination with other government incentives or grants, the amount exceeds 75 percent of the total system cost or in combination with all other incentives exceeds 100 percent of total system cost.

- Provide jobs data.
- Show that property taxes related to the project site are current.
- Show that contract and loan agreements directly related to the project are not in default.

4.4 Inspection

A project may be inspected by the Department to determine that it is complete and operating as intended. These inspections are scheduled with the project owner.

Section 5: Additional Information

5.1 Public Information, Confidentiality

The State of Oregon's Public Records Law (ORS 192.311 through 192.478) applies to filings and applications submitted to the Department. The law states every person has a right to inspect any public record of a public body, subject to certain exceptions. Applications are public records and the Department may be required by law to disclose information in the application to the public on request. An applicant may request confidentiality of certain information in its application by marking the information confidential. Marking information does not guarantee that it will be kept confidential, however, and the Department will make any decisions regarding public disclosure of information contained in this application in accordance with Oregon Public Records Law.

The Department may publicly announce awarded grantees under this program. The public announcement may include, but is not limited to, the system owner's name, type of system, location of system and awarded grant amount.

5.2 Reservation of Department Rights

The Department reserves all rights regarding this opportunity announcement, including, without limitation, the right to:

- 1. Amend, delay, or cancel the opportunity announcement without liability if the Department finds it is in the best interest of the State of Oregon to do so;
- Not consider any or all applications received upon finding that it is in the best interest of the State of Oregon to do so;
- 3. Deem incomplete any application that fails substantially to comply with all prescribed opportunity announcement procedures and requirements; and

- 4. Allocate grants not to exceed 35 percent of the system costs up to a maximum of \$250,000, at its discretion. See ORS 469B.256.
- 5. Allocate a grant amount less than the amount requested by applicant, at its discretion.

5.3 No Obligation

The Department is not obligated as a result of the submission or acceptance of an application to award a grant to an applicant.

5.4 Sunset Information

If awarded, a RED grant applicant's performance agreement will outline the timeframe required to receive the grant award. In general RED grant performance agreements provide three years from the date of the agreement for the applicant to complete the project.

Exhibit A

As a condition of your Renewable Energy Development (RED) grant, project construction must begin within 12 months of the execution of the performance agreement. The following guidance is intended to clarify what does and does not constitute beginning construction activities for the purposes of the RED grant.

"Beginning construction" as outlined in your Performance Agreement, means the start of the physical assembly of the project or its infrastructure at the project site.

The following activities **will be considered** beginning construction activities for the RED grant purposes:

- On-site assembly of equipment listed in the system description of the Performance Agreement
- On-site assembly of infrastructure such as equipment foundations, holding tanks, or racking equipment
- Installation of electrical infrastructure such as a switch yard, substation, or upgrades to a motor control center (MCC)
- Construction of mounting equipment or support systems

The following activities <u>will not</u> be considered beginning construction activities for RED grant purposes:

- Project planning activities such as:
 - Design
 - Permitting
 - Land surveys or sampling
 - Interconnection or utility agreements
 - Other project preparation activities
- Site preparation activities such as:
 - Demolition
 - Excavation or grading
 - Constructing access roads
 - Installing temporary or permanent fencing
 - Other activities to get the site "construction ready"
- Off-site assembly of project equipment
- Delivery of project equipment or materials
- Pre-existing infrastructure
- The simple incurrence of eligible project costs

The 12-month deadline to begin construction of the project cannot be amended or waived. For projects that do not submit a final report within 1 year of the execution of the performance agreement, ODOE may verify that construction has begun by requesting labor invoices demonstrating construction activities from the list above have occurred at the project site and physical site inspections. If projects are unable to demonstrate they have begun construction, the performance agreement and grant will be considered void.



Memo

TO: Adam Hanks, Assistant to the City Administrator

FROM: Stu Green, Climate and Energy Analyst

DATE: April 5, 2019

RE: ODOE Grant Application – Project Description

The proposed project is a roof-mounted solar electric project, developed by the City of Ashland Electric Utility for the purposes of increasing resiliency of essential municipal infrastructure. On-site energy storage will serve Ashland's Emergency Operations Center. Additional benefits to the utility include increasing the utility's renewable energy portfolio, reducing imported electricity, increasing energy independence, and reducing greenhouse gas emissions.

The City may choose to develop this project in one of two ways:

- 1. PPA The Utility may develop this system as a PPA (power purchase agreement). Using a PPA to develop this project has the potential to lower the City's overall costs, although PPAs are usually used for projects greater than 500 kW. PPAs costs are predicted to be slightly higher than current wholesale power costs, with minimal upfront investment from the Utility. With Council direction, staff are prepared to explore the feasibility of a PPA for this project.
- 2. Direct ownership Assuming a 35% match from ODOE, the Utility would still need to fund the balance of the project approximately \$325k-\$400k.

Nameplate capacity:

- 250-300 kW DC rating (divided among 2-3 rooftops at Service Center)
- Energy storage sized for EOC loads (2-day, no-input back-up?)

Expected Net Generation

• For 250kW DC system, approx. 325,000 kWH/ year

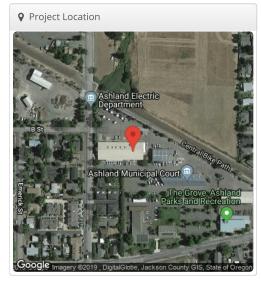


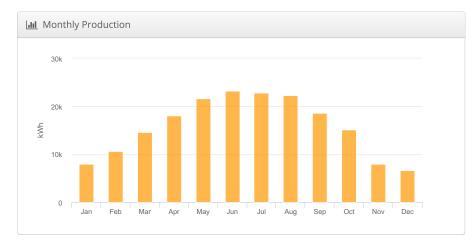


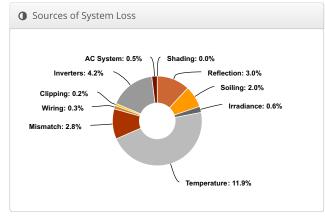
Design 1 Ashland, 90 N Mountain Ave, Ashland, OR 97520

& Report				
Project Name	Ashland			
Project Address	90 N Mountain Ave, Ashland, OR 97520			
Prepared By Evan Ramsey eramsey@b-e-f.org				
	beg			

Lill System Metrics					
Design	Design 1				
Module DC Nameplate	137.6 kW				
Inverter AC Nameplate	100.0 kW Load Ratio: 1.38				
Annual Production	189.7 MWh				
Performance Ratio	76.8%				
kWh/kWp	1,377.9				
Weather Dataset	TMY, MEDFORD ROGUE VALLEY INTL AP [ASHLAND - UO], NSRDB (tmy3, I)				
Simulator Version	b23dcd9a40-f126e51428-69d73c5df3- e2a081a8ea				







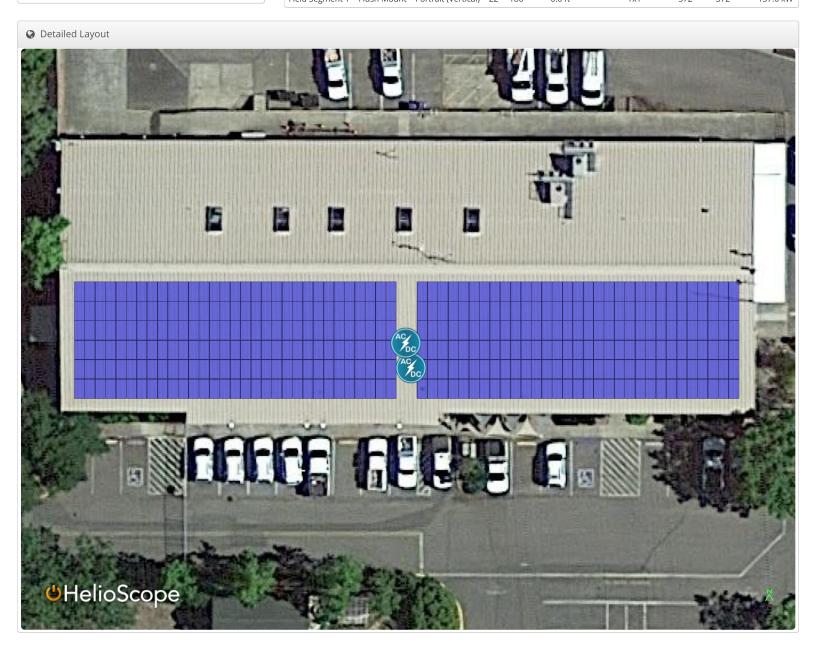
	Description	Output	% Delta		
	Annual Global Horizontal Irradiance	1,594.2			
	POA Irradiance	1,794.7	12.6%		
Irradiance	Shaded Irradiance	1,794.5	0.0%		
(kWh/m ²)	Irradiance after Reflection	1,740.1	-3.0%		
	Irradiance after Soiling	1,705.3	-2.0%		
	Total Collector Irradiance	1,705.3	0.0%		
	Nameplate	234,869.2			
Energy (kWh)	Output at Irradiance Levels	233,554.6	-0.6%		
	Output at Cell Temperature Derate	205,830.6	-11.9%		
	Output After Mismatch	200,103.7	-2.8%		
	Optimal DC Output	199,482.0	-0.3%		
	Constrained DC Output	199,068.8	-0.2%		
	Inverter Output	190,609.2	-4.2%		
	Energy to Grid	189,656.1	-0.5%		
Temperature M	etrics				
	Avg. Operating Ambient Temp		15.1 °C		
	Avg. Operating Cell Temp		35.0 °C		
Simulation Met	rics				
Operating Hours					
		Solved Hours	4596		

Condition Set													
Description	Condition Set 1												
Weather Dataset	TMY, MEDFORD ROGUE VALLEY INTL AP [ASHLAND - UO], NSRDB (tmy3, I)												
Solar Angle Location	Meteo Lat/Lng												
Transposition Model	Perez Model												
Temperature Model	Sanc	lia Mo	odel										
T NAI-I	Rack Type				a		b		Те	Temperature Delta			
Temperature Model Parameters	Fixed Tilt				-3.5	6	-0.0	75	3°	3°C			
	Flus	h Mo	unt		-2.81 -		-0.0	-0.0455		0°C			
Soiling (%)	J	F	M	Α		М	J	J	Α	S	0	N	D
	2	2	2	2		2	2	2	2	2	2	2	2
Irradiation Variance	5%												
Cell Temperature Spread	4° C												
Module Binning Range	-2.59	6 to 2	.5%										
AC System Derate	0.50	0.50%											
	Module Characterization												
Module Characterizations	CS3U-370MB-AG (Canadian Spec She Solar) PAN								Shee	et Characterization,			
Component	Devi	ce								Cha	racte	izatior	1
Characterizations	PVI5	0kW-	480 (S	olec	tria	Rene	ewabl	es)		CEC	2014	-08-16	



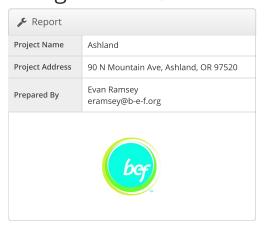
⊖ Components						
Component	Name	Count				
Inverters	PVI50kW-480 (Solectria Renewables)	2 (100.0 kW)				
Strings	10 AWG (Copper)	36 (4,335.6 ft)				
Module	Canadian Solar, CS3U-370MB-AG (370W)	372 (137.6 kW)				

♣ Wiring Zones													
Description Combiner Poles					tring Size	Stringing	ng Strategy						
Wiring Zone	12	8	-11	Along Ra	Along Racking								
0													
III Field Segm	nents												
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power				
Field Segment 1	Flush Mount	Portrait (Vertical)	22°	180°	0.0 ft	1×1	372	372	137 6 kW				

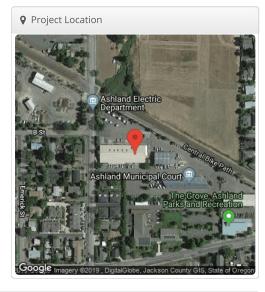


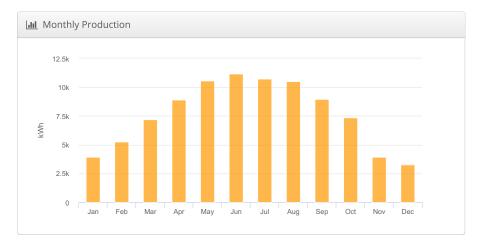


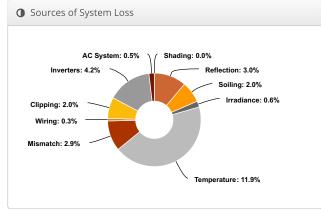
$Design\ 2\ {\it Ashland},\ 90\ {\it N}\ {\it Mountain}\ {\it Ave},\ {\it Ashland},\ {\it OR}\ 97520$



Lill System Metrics								
Design	Design 2							
Module DC Nameplate	67.7 kW							
Inverter AC Nameplate	50.0 kW Load Ratio: 1.35							
Annual Production	91.69 MWh							
Performance Ratio	75.5%							
kWh/kWp	1,354.2							
Weather Dataset	TMY, MEDFORD ROGUE VALLEY INTL AP [ASHLAND - UO], NSRDB (tmy3, I)							
Simulator Version	b23dcd9a40-f126e51428-69d73c5df3- e2a081a8ea							







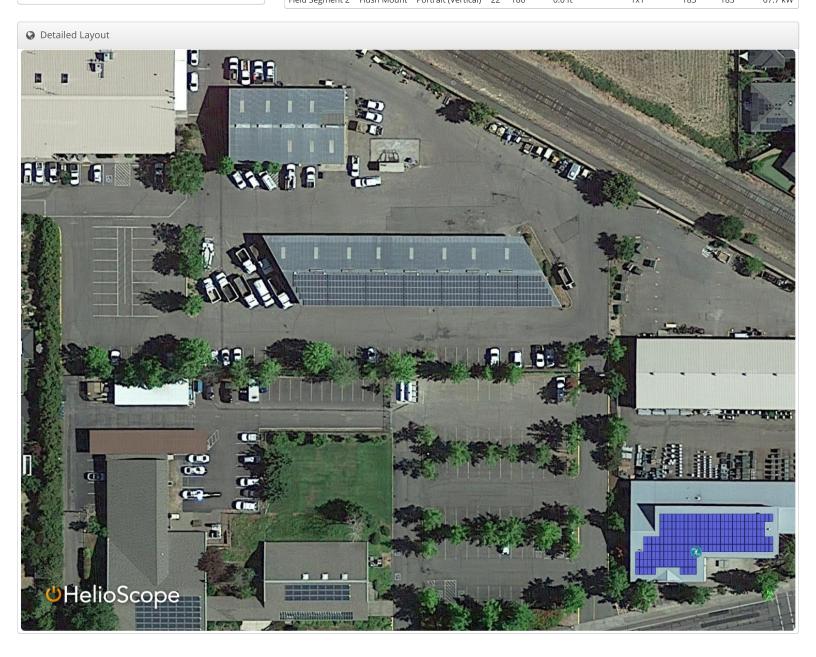
7 Annual Pr	roduction						
	Description	Output	% Delta				
	Annual Global Horizontal Irradiance	1,594.2					
	POA Irradiance	1,794.7	12.6%				
Irradiance	Shaded Irradiance	1,794.5	0.0%				
(kWh/m ²)	Irradiance after Reflection	1,740.1	-3.0%				
	Irradiance after Soiling	1,705.3	-2.0%				
	Total Collector Irradiance	1,705.3	0.0%				
	Nameplate	115,543.2					
	Output at Irradiance Levels	114,896.6	-0.6%				
	Output at Cell Temperature Derate	101,257.5	-11.9%				
Energy	Output After Mismatch	98,360.3	-2.9%				
(kWh)	Optimal DC Output	98,113.2	-0.3%				
	Constrained DC Output	96,171.5	-2.0%				
	Inverter Output	92,150.5	-4.2%				
	Energy to Grid	91,689.7	-0.5%				
Temperature M	etrics						
	Avg. Operating Ambient Temp		15.1 °C				
Avg. Operating Cell Temp							
Simulation Met	rics						
Operating Hours							
Solved Hours							

Condition Set													
Description	Cond	dition	Set 1										
Weather Dataset	TMY,		FORD	RO	GU	E VAL	LEY IN	ITL AP	[ASH	ILAND) - UO], NSRI	DВ
Solar Angle Location	Mete	eo Lat	/Lng										
Transposition Model	Perez Model												
Temperature Model	Sandia Model												
Temperature Model Parameters	Rack Type				а		b		Te	mper	ature l	Delta	
	Fixed Tilt				-3.5	56	-0.0	-0.075		3°C			
	Flush Mount				-2.8	81	-0.0	155 0°C					
Soiling (%)	J	F	M	Α		М	J	J	Α	S	0	N	D
	2	2	2	2		2	2	2	2	2	2	2	2
Irradiation Variance	5%												
Cell Temperature Spread	4° C												
Module Binning Range	-2.59	6 to 2	.5%										
AC System Derate	0.50	%											
	Mod	ule						Char	acteri	ization			
Module Characterizations	CS3 Sola		MB-AC	5 (C	ana	adian		Spec PAN	Shee	eet Characterization,			
Component	Devi	ce								Cha	racte	izatior	1
Characterizations	PVI5	0kW-	480 (S	olec	ctria	a Ren	ewabl	es)		CEC	2014	-08-16	



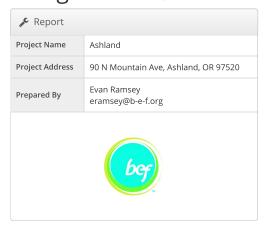
□ Compo	☐ Components									
Component	Name	Count								
Inverters	PVI50kW-480 (Solectria Renewables)	1 (50.0 kW)								
Strings	10 AWG (Copper)	19 (1,510.9 ft)								
Module	Canadian Solar, CS3U-370MB-AG (370W)	183 (67.7 kW)								

♣ Wiring Zones													
Description	Cor	nbiner Poles	S	tring Size	Stringing	Stringing Strategy							
Wiring Zone	/iring Zone 12					Along Racking							
III Field Segm	nents												
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power				
Field Segment 2	Flush Mount	Portrait (Vertical)	220	180°	0.0 ft	1 v 1	183	183	67.7 kW				

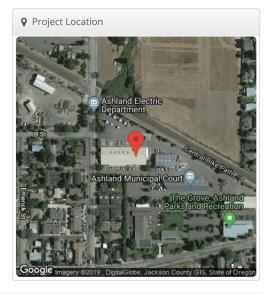


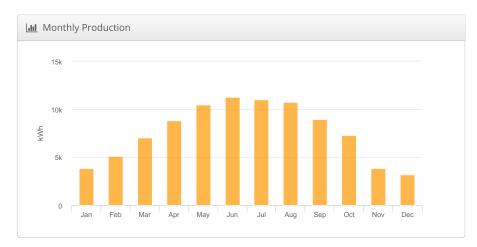


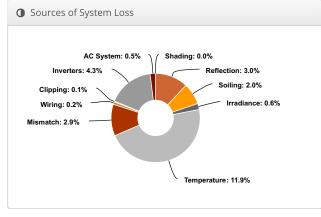
$Design \ 3 \ {\it Ashland}, \ 90 \ N \ Mountain \ Ave, \ Ashland, \ OR \ 97520$



Lill System Metrics								
Design	Design 3							
Module DC Nameplate	66.6 kW							
Inverter AC Nameplate	50.0 kW Load Ratio: 1.33							
Annual Production	91.78 MWh							
Performance Ratio	76.8%							
kWh/kWp	1,378.0							
Weather Dataset	TMY, MEDFORD ROGUE VALLEY INTL AP [ASHLAND - UO], NSRDB (tmy3, I)							
Simulator Version	b23dcd9a40-f126e51428-69d73c5df3- e2a081a8ea							







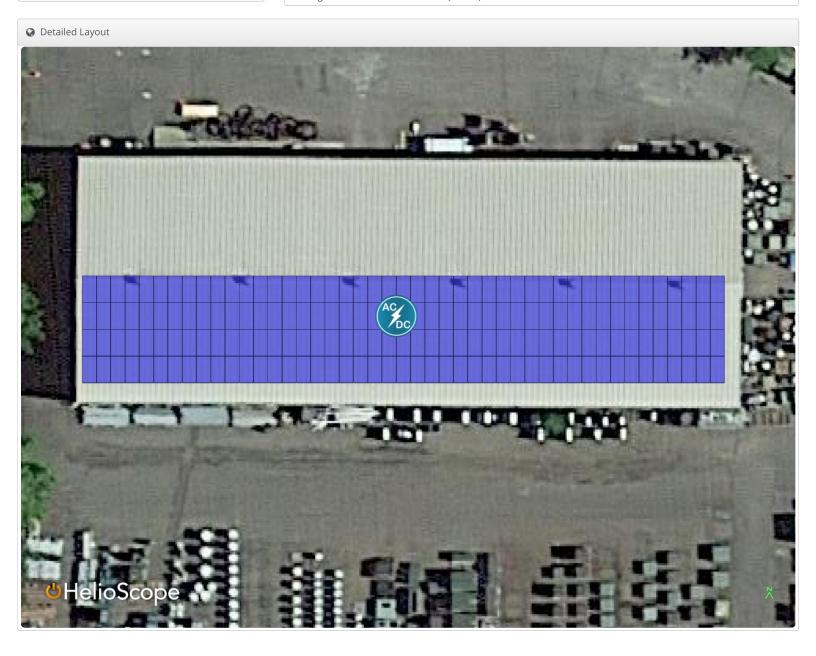
	Description	Output	% Delta				
	Annual Global Horizontal Irradiance	1,594.2					
	POA Irradiance	1,794.7	12.6%				
Irradiance	Shaded Irradiance	1,794.5	0.0%				
(kWh/m ²)	Irradiance after Reflection	1,740.1	-3.0%				
	Irradiance after Soiling	1,705.3	-2.0%				
	Total Collector Irradiance	1,705.3	0.0%				
	Nameplate	113,652.5					
	Output at Irradiance Levels	113,016.2	-0.6%				
	Output at Cell Temperature Derate	99,599.8	-11.9%				
Energy	Output After Mismatch	96,677.6	-2.9%				
(kWh)	Optimal DC Output	96,451.2	-0.2%				
	Constrained DC Output	96,377.1	-0.1%				
	Inverter Output	92,237.6	-4.3%				
	Energy to Grid	91,776.4	-0.5%				
Temperature I	Metrics						
	Avg. Operating Ambient Temp		15.1 °C				
Avg. Operating Cell Temp							
Simulation Me	trics						
Operating Hours							
Solved Hours							

Condition Set														
Description	Cond	dition	Set 1											
Weather Dataset	TMY (tmy		FORD	RO	GL	JE VAL	LEY IN	ITL AF	(ASF	ILAND) - UO], NSRI	DВ	
Solar Angle Location	Mete	eo Lat	/Lng											
Transposition Model	Perez Model													
Temperature Model	Sandia Model													
Temperature Model Parameters	Rack Type				а		b		Te	mper	ature	Delta		
	Fixed Tilt				-3.	.56	-0.0	0.075		3°C				
	Flush Mount				-2.	.81	-0.0	455	0°	C	5			
Soiling (%)	J	F	M	Α	١.	М	J	J	Α	S	0	N	D	
558 (74)	2	2	2	2	2	2	2	2	2	2	2	2	2	
Irradiation Variance	5%													
Cell Temperature Spread	4° C													
Module Binning Range	-2.59	% to 2	.5%											
AC System Derate	0.50	%												
	Mod	lule						Char	acter	izatio	n			
Module Characterizations	CS3 Sola		MB-AG	G (C	an	adian		Spec	Shee	et Characterization,				
Component	Devi	ice								Cha	racte	izatior	1	
Characterizations	PVIS	0kW-	480 (S	oled	ctri	ia Ren	ewabl	es)		CEC	2014	-08-16	,	



☐ Components									
Component	Name	Count							
Inverters	PVI50kW-480 (Solectria Renewables)	1 (50.0 kW)							
Strings	10 AWG (Copper)	17 (1,475.3 ft)							
Module	Canadian Solar, CS3U-370MB-AG (370W)	180 (66.6 kW)							

♣ Wiring Zones												
Description Combiner Poles			S	tring Size	Stringing	Stringing Strategy						
Wiring Zone	ring Zone 12			8	-11	Along Racking						
Ⅲ Field Segm	nents											
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power			
Field Segment 2	Flush Mount	Portrait (Vertical)	22°	180°	0.0 ft	1x1	180	180	66.6 kW			





ADMINISTRATIVE POLICY

LAST MODIFICATION: 8-20-2014

11-01.04

ORIGINATING DEPARTMENT: Administrative Services

SUBJECT: Approval Process to Apply for or Receive Grants

PURPOSE: This sets forth the City's policy and procedure for a department to get City Council's approval to apply for a grant.

STATEMENT OF POLICY: The City of Ashland will seek and accept federal, state and local grants to fund needed programs, projects, operations or purchases whenever it is advantageous to the City to do so. City Council will authorize the application in advance of submission whenever the grant amount exceeds \$10,000 or in any amount if the grant involves hiring new personnel or expanding the hours of existing personnel. Council approval shall also be required for any grant requiring a cash match by the city. The City Council shall approve acceptance of all grants before receipt/expenditure to ensure the City can meet all of the requirements of the grant.

POLICY:

The City of Ashland departments will obtain City Council approval to apply for a grant. The approval can be done as part of the annual or biennial budget process or as part of a Consent Agenda on any regular or special Council meeting.

- A. The request for approval will be in memo form, consistent with current Council Communication formats, supported by sufficient documentation to assist Council in making an informed decision. Grants for less than \$10,000 and those with no "money match" requirement are exempted from this requirement.
- B. Staff will provide the following information as a minimum:
 - 1. The source of the grant, name of granting agency or company.
 - 2. The name of the project and/or expenditure to be funded by the grant.
 - 3. Time frame that project costs or expenditures will likely occur.
 - 4. The department/division and person to manage the grant (if the staff member is different than the department head and has been identified at the time).
 - 5. Amount and source of matching money or expenses, if any.
 - 6. Anticipated impact on current and future budgets.
 - 7. Restraints, stipulations, requirements, related to acceptance of the grant and compliance.
 - 8. Deadline for application and anticipated date grant will be awarded.
- C. After acceptance staff may submit the grant application.
- D. Upon notification of award, the department responsible for the grant will submit a request to Council to accept the grant award. The report can be submitted as part of Council's

Consent Agenda and will request applicable authorization to proceed with the work or purchase, amend the budget if necessary or to appropriate for completion in future budget years.

If any desired grant application process has a deadline for submission that does not lend itself to the above approval process, with the City Administrator's approval, a department may submit the application to meet the deadline in advance of Council approval. In such case, the department responsible for the grant application will submit the appropriate information identified above to Council at their next regular business meeting, requesting ratification of the application.

If a grant application request is denied by Council, staff work will cease.

If a grant award is denied by Council, staff will notify the granting entity and immediately return any funds received.

Anticipated grants (potential or certain) known at the time of budget preparation will be incorporated in the document and specifically addressed in the managing department's narrative identifying the source(s) and use(s) of the money. If anticipated grant funds are appropriated in the annual or biennial budget process, separate Council approval of the grant application is not required.

Grants rejected	during the	budget	process w	ill not b	e pursued	without	specific p	orior a	pproval by
Council.									

Approved:

Dave Kanner, City Administrator

Reviewed as to form:

David Lohman City Attorney

Date



Tel: 541-488-5300 Fax: 541-488-5311

TTY: 800-735-2900