

# Irrigation Conservation Customer Participation Agreement

Klickitat PUD  
1313 S. Columbus Ave.  
Goldendale, WA 98620

Customer Name: \_\_\_\_\_ Date: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Account # \_\_\_\_\_ Telephone number: \_\_\_\_\_

1. I certify that I am the legal owner of irrigated farm land located at:  
\_\_\_\_\_
  
2. I hereby request Klickitat PUD to financially assist in the conservation measures for this irrigated farm land.
  
3. I understand that:
  - a) I, or the person authorized below, must be present at the time inspections are conducted. \_\_\_\_\_ is authorized to represent me and will be present during the inspection of my home.  
This person  is,  is not, an authorized to sign the necessary paperwork.
  
  - b) Kickbacks, rebates, non-authorized discounting of bids or other non-program benefits from the installers are prohibited, and may be subject to federal law.
  
  - c) All materials and installation must comply with current KPUD/BPA conservation specifications in order to be eligible for funding through this program.
  
  - d) Any structural defects in the irrigation equipment (pipe leaks, etc.) must be repaired prior to the installation of any PUD approved measures, and paid by the customer.
  
  - e) I must secure bids, and work must commence within ninety (90) days in order to receive PUD funds.
  
  - f) If I perform any of the work myself, none of my labor charges can be added to cost.
  
  - g) The PUD shall not be liable for the tortious acts or omissions of the installers or other independent contractors.
  
  - h) Installers, participating in the program shall not be considered officers, agents or employees of BPA or PUD.

- i) Funding for conservation measures is available only for irrigation within Klickitat PUD's service territory. Converting from another fuel source (e.g. natural gas, propane, wood, etc.) is not allowed.

\* Klickitat PUD will pay the lesser of the deemed savings and may change rebate prices without notice. Please check with your Energy Services Specialist for rebate prices, which are pending on an approved inspection

4. I certify that:

- a) I have received and read the privacy act notice of the PUD, and will comply with the conditions therein.
- b) I have received and read the paperwork describing the measures and maximum funding amounts available under this program.
- c) Electric is services is provided by Klickitat PUD.

\_\_\_\_\_  
Customer Signature

\_\_\_\_\_  
Date

**Supplemental Information**

**SITE INFORMATION:**

*Enter per irrigation site as it applies:*

Acreage	Crop	Months irrigated	Hours of irrigation

**Klickitat Public Utility District #1 (KPUD)**  
**KPUD Pump Motors Program**  
**Rebates and Requirements**

KPUD's reimbursements for Pump Motor Measures are shown in the attached Irrigated Agriculture Pump Motor Verification Report. The procedures and requirements listed below must be followed in order to receive reimbursement from KPUD for Pump Motors Measures.

- (a) KPUD shall verify that all Measures submitted for reimbursement have been installed, are operating correctly, and meet the specifications for the Measure installed.
- (b) KPUD shall complete, sign, and date a copy of the Irrigated Agriculture Rebate and Verification Reports for pump motor Measures installed. Copies of invoice(s) from equipment supplier(s) shall be attached to the report(s) submitted for reimbursement.
- (c) KPUD shall retain all supporting documents for each Project that includes—but is not limited to—purchase orders, invoices, subcontractor invoices, pre-Project estimates, or other Project documents. Bonneville Power Administration (BPA) may review these records and conduct oversight inspections
- (d) **Pump Motors**  
Pump motors shall meet or exceed the National Electrical Motor Association (NEMA) Premium Efficiency levels in the Agricultural Standard Offer (AgSO) Irrigated Agriculture Pump Motor Report and shall be new three-phase alternating current motors of NEMA design A, B, or C. Pump motors may be Open Drip Proof (ODP) or Totally Enclosed Fan Cooled (TEFC).



## Motor Rebates

Motor replacements are assumed to be in lieu of rewinding the motor or at the time of failure. Incremental project costs and incremental savings are calculated as the difference between the Nation Electrical Manufactures Association (NEMA) standard efficiency motor and the proposed motor for the same size and application.

\* Credit / reimbursement for irrigation motor measures requires that the motor is **OPEN DRIP PROOF (ODP) or TOTALLY ENCLOSED FAN COOLED (TEFC) and operates at 1,800 rpm and is replacing an older rewound motor.** (Other types of motors will need to be submitted as a customer proposal.)

\* Motor measures under this section must be installed in an irrigated or agricultural application in the customer's service area. The Motors may be purchased anywhere.

\* Motor measures under this section must be new, three-phase AC induction, 5 to 500 horsepower, and NEMA design A, B, or C

\* Motor measures under this section must meet or exceed the NEMA Premium efficiency standard shown in the tables below.

## Required Documentation

**Documentation for motor rebate claims must include:**

- |                          |                                                                             |
|--------------------------|-----------------------------------------------------------------------------|
| <input type="checkbox"/> | Equipment invoices                                                          |
| <input type="checkbox"/> | Spec sheet or model number of installed equipment                           |
| <input type="checkbox"/> | Proof of ODP or TEFC operating at 1,800 rpm                                 |
| <input type="checkbox"/> | Field location and description identifying the site of installed measure(s) |

**Credits / Reimbursements for Irrigation System Motors**

Measure Description HP	Motor Efficiency	NEMA Premium Efficiency	Rebate Per unit	Estimated Savings Per Unit (kWh/yr.)
5 Horsepower	83.0%	89.5%	\$ 38.50	352
7.5 Horsepower	84.0%	91.0%	\$ 59.50	569
10 Horsepower	85.0%	91.7%	\$ 77.00	726
15 Horsepower	87.3%	92.4%	\$ 87.50	829
20 Horsepower	88.0%	93.0%	\$ 115.50	1,084
25 Horsepower	88.0%	93.6%	\$ 210.00	1,518
30 Horsepower	88.8%	94.1%	\$ 238.00	2,290
40 Horsepower	89.3%	94.1%	\$ 315.00	3,053
50 Horsepower	89.3%	95.0%	\$ 416.00	4,134
60 Horsepower	89.5%	95.0%	\$ 490.00	5,247
75 Horsepower	89.5%	95.0%	\$ 689.50	6,559
100 Horsepower	90.0%	95.4%	\$ 903.00	8,586
125 Horsepower	90.3%	95.4%	\$ 1,064.00	10,137
150 Horsepower	90.8%	95.8%	\$ 1,253.00	11,926
200 Horsepower	91.0%	95.8%	\$ 1,603.00	15,265
250 Horsepower	91.0%	95.8%	\$ 2,002.00	19,081
300 Horsepower	91.0%	95.8%	\$ 2,468.00	22,897
350 Horsepower	91.0%	95.8%	\$ 2,807.00	26,713
400 Horsepower	91.0%	96.2%	\$ 2,870.00	27,349
450 Horsepower	91.0%	96.2%	\$ 3,535.00	33,630
500 Horsepower	91.0%	96.2%	\$ 3,920.00	37,367

**Credits / Reimbursements for Medium Voltage Irrigation System Motors  
(600v to 5,000v)**

Measure Description HP	NEMA Premium Efficiency	Rebate Per unit	Estimated Savings Per Unit (kWh/yr.)
250 Horsepower	95.0%	\$ 1,669.50	15,901
300 Horsepower	95.0%	\$ 2,003.40	19,081
350 Horsepower	95.0%	\$ 2,337.30	22,261
400 Horsepower	95.0%	\$ 2,337.30	22,261
450 Horsepower	95.0%	\$ 2,629.90	25,044
500 Horsepower	95.0%	\$ 2,921.80	27,826

# Klickitat PUD

## Irrigation Pump Motors Rebate Coupon



**Klickitat PUD**  
Owned By Those It Serves

### CONSUMER INFORMATION

Date \_\_\_\_\_ Company Name \_\_\_\_\_

Project address \_\_\_\_\_

KPUD account # \_\_\_\_\_ KPUD rate Schedule \_\_\_\_\_

Contact person \_\_\_\_\_ Title \_\_\_\_\_

Mailing address \_\_\_\_\_

Phone # \_\_\_\_\_ Fax # \_\_\_\_\_

Tax I.D. # (Required) \_\_\_\_\_

Corporation \_\_\_\_\_ Sole Proprietorship \_\_\_\_\_ Partnership \_\_\_\_\_

Field Location \_\_\_\_\_ Date Motor Purchased \_\_\_\_\_

Replaced Motor			New Motor			
Model / Brand	Horsepower	Motor Efficiency	Model / Brand	Horsepower	NEMA Premium Efficiency	Estimated Savings

**Medium Voltage Irrigation System Motors (600v to 5,00v)**

Replaced Motor			New Motor			
Model / Brand	Horsepower	Motor Efficiency	Model / Brand	Horsepower	NEMA Premium Efficiency	Estimated Savings

**\*\* Please attach Equipment Invoices, Spec Sheets, Model number of installed equipment, Proof of ODP or TEFC operation at 1,800 rpm.**

Office Use Only	
Date Received _____	Date Approved _____ Final Inspection date _____
Documented old motor _____	Documented new NEMA motor _____
Is old motor in running condition? _____	
Inspector _____	Amount to be Rebated \$ _____
GL # 908.93 11-61-57	Manager Approval _____

**KLICKITAT PUBLIC UTILITY DISTRICT #1 (KPUD)**  
**Irrigation Sprinkler Measures Program**  
**Revised 2/14/06**  
**(CRC)**

**Purpose:**

To maximize the efficient use of electricity of existing irrigation systems in the KPUD service territory through the use of new water-efficient sprinklers, nozzles, gaskets, regulators, drop tubes, and goose necks.

**Availability:**

Incentives are available to KPUD consumers who purchase and install approved irrigation measures on irrigation systems that are electrically pumped and distribute water for the purpose of growing crops within KPUD's service territory. Stationary systems are not eligible for sprinkler measures under this program.

**Customer Procedure:**

**Consumer**

1. Contacts KPUD and expresses interest in improving energy-efficiency of his/her irrigation system.

**Energy Services**

2. Explains all current irrigation energy-efficiency programs available (Sprinkler Measures, Pump Testing, Premium-Efficiency Motors) and schedules necessary audits.
3. During the audit(s), the Energy Services Representative explains to the consumer the requirements and procedures of the program, then completes an audit of the hand, wheel, or pivot irrigation system.
4. Completes an Irrigated Agriculture Sprinkler Verification Report form for the file.
5. Completes an Irrigation Sprinkler Equipment Retrofit Application and forwards it to the Member Services Manager for approval.
6. After approval, contacts the consumer and directs him/her to proceed by purchasing and installing the approved equipment.
7. The consumer notifies KPUD that installation is complete, and requests a final inspection by the Energy Services Specialist.
8. After the final inspection reveals proper equipment and installation to be complete, the Energy Services Representative obtains any additional required information found on the sprinkler verification report, including copies of equipment supplier invoices.
9. Completes an Accounts Payable Voucher using GL # 0908.57, attaches copies of the Application, Sprinkler Verification Report, and supplier invoices, and then submits the packet to the Energy Services Manager for payment.

**Manager of Energy Services**

10. Reviews the packet, checking that all documents are in order; then approves and submits the Voucher for payment.

## **SPRINKLER MEASURES**

### **(a) New Flow Controlling Type Nozzle for Impact Sprinklers**

New flow controlling type nozzles are to be eligible (Per Section 3 (b) and 3(c)) for sprinklers on hand lines and wheel lines. All nozzles on the wheel line or hand line must be replaced in order to be eligible. The existing sprinkler nozzles can be a fixed orifice or a flow control type nozzle. The new flow controlling type nozzle must have a flow rating rated equal to or less than the flow rating of the existing sprinkler nozzle at 40 PSI.

### **(b) New Fixed-Orifice Nozzles for Impact Sprinklers**

New fixed orifice nozzles are to be eligible (Per Section 3(b) and 3(c)) for impact sprinklers on hand lines and wheel lines. All sprinkler head nozzles on the wheel line or hand line must be replaced in order to be eligible. The new nozzle must have a flow rating rated equal to or less than the flow rating of the existing sprinkler nozzle at 40 PSI.

### **(c) Rebuilt or New Sprinklers**

Existing worn out impact sprinklers are to be rebuilt or replaced (Per Section 3(b) and 3(c)) with new impact sprinklers. The rebuild of brass impact sprinklers must be performed by an established repair shop and meet or exceed manufacturers' specifications. Eligible sprinklers can be installed on a wheel line or hand line. New nozzles must be installed prior to installation of the brass sprinkler. New nozzles are also eligible for rebate.

### **(d) New Rotating Type Sprinkler Replacing Impact Sprinklers**

New rotating type sprinklers must replace existing impact sprinklers. Eligible sprinklers can be installed on a wheel line, a hand line, center pivot or lateral move. The flow rating at 50 PSI of the new sprinkler must be equal to or less than the flow rating of the existing sprinkler nozzle.

### **(e) Low Pressure Pivot and Lateral Move Sprinklers**

New Low Energy Precision Application (LEPA) emitters, rotators, wobblers, spinners, and high performance sprays are eligible for lateral move or pivot systems. In order to be eligible for rebate/reimbursement, all regulators along the center pivot or lateral move must be replaced. If additional sprinklers are required due to sprinkler spacing, then these additional sprinklers also qualify for reimbursement under the program. The flow rating of the new sprinkler package must be rated equal to or less than the flow rating of the existing sprinkler package.

As of Oct 1, 2006, any sprays installed must be considered multi-trajectory and should be limited to soils with high infiltration rates. For multi-trajectory sprays, the spray plate is constructed with two or more groove depths.

### **(f) New Multiple Configuration Nozzles for Low-Pressure Pivot and Lateral Move Sprinklers**

These multiple configuration nozzles shall be for installation on low-pressure sprinklers for center pivot or lateral moves. The intent is that the flow rate can be changed once for planting and again when the crop canopy emerges. The flow rating at 30 PSI of the one nozzle configuration must be equal to 80 percent or lower than the flow rating of the other sprinkler nozzle.

### **(g) New Low-Pressure Regulators**

New low-pressure regulators may be eligible for pivots or lateral move systems. In order to be eligible for rebate/reimbursement, all regulators along the center pivot or lateral move must be replaced. If additional sprinklers are required due to sprinkler spacing, then the additional regulators also qualify for reimbursement under the program.

- (h) **New Gaskets for Wheel-Lines, Hand-Lines, and Main Line**  
Installed gaskets are eligible for reimbursement when an entire wheel- or hand-line's gaskets are replaced. Leaking mainline riser cap gaskets or portable mainline section gaskets are also eligible for reimbursement when replaced.
- (i) **New Drains for Wheel-Lines or Hand-Lines**  
Installed drains are eligible for reimbursement when a wheel line or hand line's drains are replaced. To be eligible, all drains must be replaced at the same time.
- (j) **New "Goose Neck" Elbows for New Drop Tubes**  
New gooseneck elbows shall be installed on center pivots or lateral moves for low-pressure sprinkler applications. To be eligible, the existing center pivot would have sprinkler equipment mounted on top of the pivot and then converted to low-pressure sprinklers with low-pressure regulators on new drop tubes.
- (k) **New Drop Tubes for Low-Pressure Pivot Sprinklers**  
New drop tubes for low-pressure sprinklers shall be for applications on center pivots or lateral moves. The length of the drop tube can vary, but must extend below the pivot tower brace. Hose extensions for existing drop tubes are also eligible. The new drop tube, or hose extension, shall be a minimum of 3 feet in length.
- (l) **Pivot Point Boot Gasket**  
BPA will provide reimbursement for replacement of a leaking center pivot base 'boot' gasket. The new eligible gasket(s) shall be installed at the pivot point of the center pivot. Only one rebate is eligible per center pivot.
- (m) **Repair of Aluminum Pipe**  
Cut and pipe press repair of leaking hand lines, wheel lines, and portable mainline are eligible if performed by an established repair shop (An established repair shop is one that can provide a legitimate invoice showing the number of pipes repaired).
- (n) **New Hubs for Wheel Lines**  
Wheel lines that are constructed to adapt to the field contour have hubs at each wheel location. In order to be eligible under this program, all hubs on a single line must be replaced at the same time.

## Irrigated Agriculture Sprinkler Schedule Rebate Coupon

(Please indicate which item installed and quantity. One coupon per location.)

Measure Description	Reimburse- ment per Unit	Est. Savings Per Unit (kWh/yr)	Number of Units
<b>Sprinkler Equipment Reimbursement</b>	a.	b.	c.
1. New flow controlling-type nozzle for impact sprinklers	\$2.10 per nozzle	20	
2. (a) Rebuilt or new impact sprinklers (b) New nozzle for impact sprinkler replacing existing worn nozzle of same flow rate or less	\$2.63/sprinkler \$0.18 per nozzle	25 15	
3. New rotating-type sprinklers that replace impact sprinklers. (Entire pivot must be upgraded. Flow may not be increased.)	\$2.10 per sprinkler	40	
4. New gasket for wheel-lines, hand-lines or portable main-lines.	\$0.70 per gasket	30	
5. (a) New low-pressure regulators (entire pivot must be upgraded). (b) New rotating-type sprinklers that replace low-pressure sprinklers. (Entire pivot must be upgraded. Flow may not be increased.)	\$2.10 per regulator \$2.10 per sprinkler	20 20	
6. New multiple-configuration nozzles for low-pressure pivot sprinklers.	\$1.40 per sprinkler	20	
7. New multi-trajectory sprays that replace impact sprinklers. (Entire pivot must be upgraded. Flow may not be increased.)	\$1.40 per sprinkler	25	
8. New multi-trajectory sprays that replace low-pressure sprinklers. (Entire pivot must be upgraded. Flow may not be increased.)	\$0.70 per sprinkler	10	
9. New drains for wheel-lines, hand-lines or pivots. (Entire line must be upgraded.)	\$0.70 per drain	30	
10. New hubs for wheel-lines (entire wheel line must be upgraded).	\$4.20 per hub	40	
11. New gooseneck elbow for new drop tubes.	\$0.70 per goose neck	20	
12. New drop tube for low-pressure pivot sprinklers (minimum three feet in length).	\$2.10 per drop tube	20	
13. New center pivot base boot gasket.	\$87.50 per pivot	850	
14. Cut and pipe press repair of leaking hand-lines, wheel lines and portable mainline.	\$5.60 per pipe section	60	

Name: \_\_\_\_\_ PUD Location # \_\_\_\_\_  
Mailing Address: \_\_\_\_\_ Meter # \_\_\_\_\_  
\_\_\_\_\_ Location of Service: \_\_\_\_\_  
\_\_\_\_\_ PUD Account # \_\_\_\_\_

What is the total acreage under irrigation and reflected in kWh usage above? (acres) \_\_\_\_\_

What is the acreage covered by new sprinklers? (acres) \_\_\_\_\_

What is the estimated pressure at first sprinkler or at center pivot? \_\_\_\_\_

**By signing below you are stating that the above selected equipment has been installed and used in your irrigation operation.**

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

\*Please attach invoices for all measures receiving a rebate. A verification visit will be performed before rebate is released, please call to schedule. 509-773-7622 (Sharon)