

AGENDA

- **Introductions: 7:00 to 7:05**
- **Proposed Rate Increases: 7:05 to 7.10**
- **Operational Goals and Improvements: 7:10 to 7:40**
- **Rate Impacts to Customers: 7:40 to 7:45**
- **Questions and Answers: 7:45 to 8:00**
- **Adjourn: 8:00**

INTRODUCTIONS

- **Commissioners:**

Karl Denison: President

Ron Gold: Vice President

Jack Janda: Secretary

- **Staff**

Steven Taylor: General Manager

Gregory Kester: Director of Finance/Customer Service

Tracy Colard: Director of Electric Operations

PROPOSAL

- **Increase rates to our customers at 4% a year for the next 4 years:**

2010 = 4%

2011 = 4%

2012 = 4%

2013 = 4%

Cause:

- 1.) A 7.5% BPA rate increase in 2010 and projected additional rate increases from BPA over the next 3 years.**
- 2.) Borrowing from Rural Utility Services (RUS) a loan for \$8,571,000 at 5% for the next 4 year Work Plan.**



2010-2014

FOUR YEAR

CONSTRUCTION PLAN

OUR GOALS



Improve Reliability

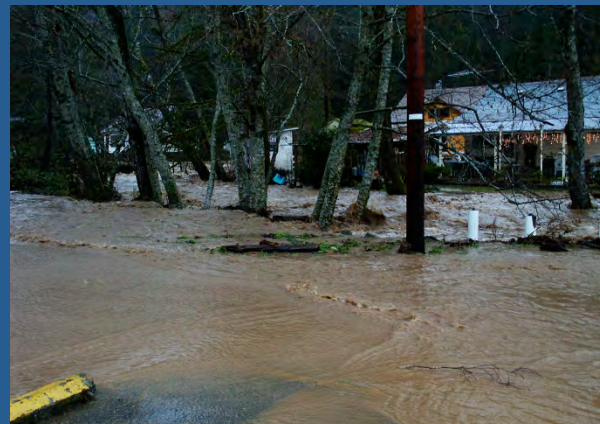
Improve Quality of Service

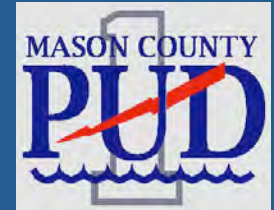
Reduce customer POWER outages



RELIABILITY ISSUES BEING ADDRESSED

- The District has three Substations which are reaching their rated safe operating capacity
- Several miles of 1970 or earlier underground power cables and overhead power line conductors have reached the end of their operational life





FOUR YEAR WORK PLAN WILL ADDRESS RELIABILITY IMPROVEMENTS BY:



- Replacement of old or failing power cables and conductors
- Installation of lightning protection in lightning prone areas
- Major Transmission Replacement
- Conversion of overhead lines to underground where cost effective
- Replacing old power pole
- Replacement of obsolete transformers
- Installation of new system protection devices





QUALITY OF SERVICE ISSUES

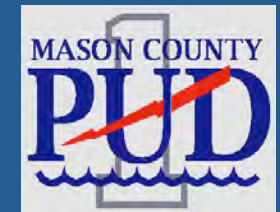
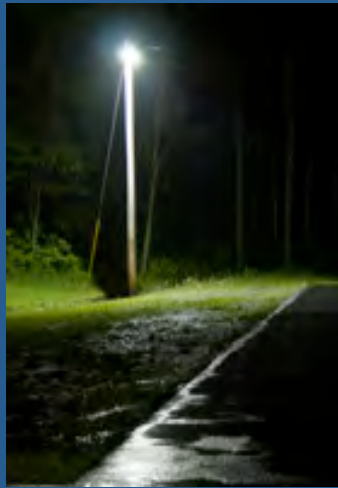
Capacity constraints due to load growth, winter heating demands do to undersized cables and conductors

Voltage problems during heavy loading

Security light quality, need frequent service or replacement. Approximately 1/2 of a linemen's time in a year is spent on repairs and replacements

Insufficient equipment for monitoring and recording power quality issues, fault events





QUALITY OF SERVICE IMPROVEMENTS



Distribution line replacements will increase capacity to our customers along the line

Voltage regulator and capacitor installations will stabilize voltage swings

Power quality monitoring equipment in substations will give us tools to monitor and make need changes

Change out of existing obsolete security light fixtures with energy efficient, better quality LED light fixtures.

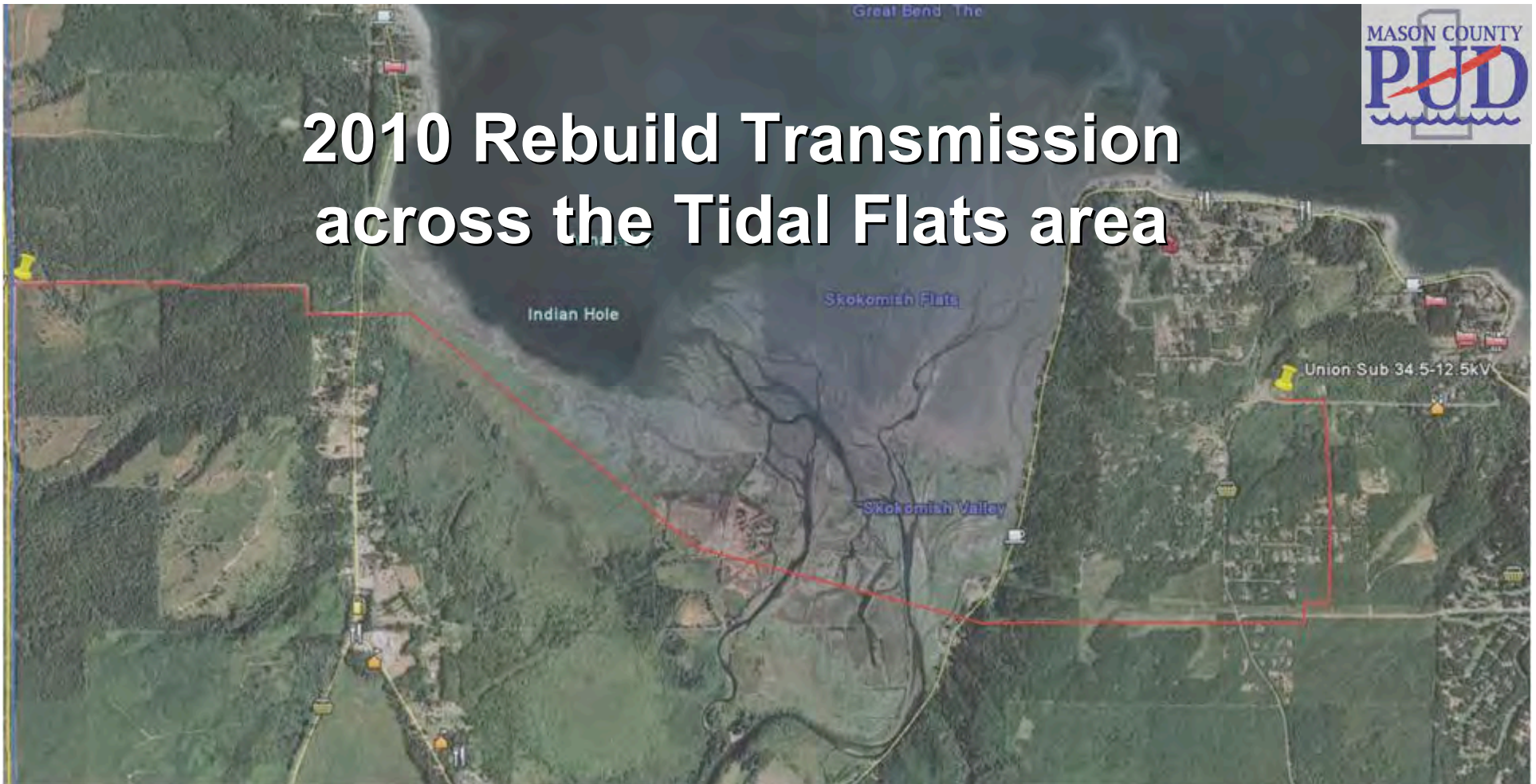




Example of one Work Plan project

**POTLATCH TO UNION
TRANSMISSION REBUILD**

2010 Rebuild Transmission across the Tidal Flats area



This is a 34,000 volt transmission line from Potlatch to the Union

It serves approximately 1200 customers

This project is to upgrade 3.02 miles of the 6.04 miles of transmission

The portion within the actual tide flats is 2.43 miles.



WHAT ARE THE ISSUES?

50 year old line (installed in early 60's)

Customer electrical demand has exceeded the safe operating levels of the original small #1/0 3-ph conductor

Faults in Hoodsport, Union, or the Skok Valley causes lights to blink in all three service areas do to the small conductor and present design

The Conservation District has scheduled this summer to remove Dikes from Skokomish River Delta – Relief of river channels places line in imminent risk of being damaged or washed away



WHAT IS BEING DONE ABOUT IT?

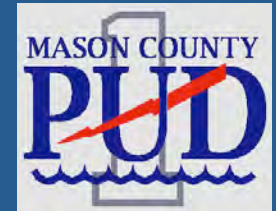
2010 we are going to rebuild 3.02 miles of the transmission line including 2.43 mile within tide flats

This line is designed for future operation with larger stronger poles, raised out of the tidal flats to avoid tidal influence

This rebuild will increase reliability, help reduce issue of area-wide blinking lights

POTLATCH TO UNION

Tidal Crossing Costs



- **1960 we built the existing 34.5kVa transmission line for \$457,000.00**
- **How much would that cost in today's dollars?**
- **\$2,665,988.00 using GDP deflator values**
- **\$3,321,859.00 using CPI of 1982-1984 values**

Engineering Estimate of 3.04
mile portion of the
Transmission project cost:

\$2,266,317.00

Transmission Project CONCLUSIONS



We acknowledge it is an expensive project

**Out of eight alternative solutions this is the most prudent
for the dollars being spent**

It is an overdue solution

It is not an overnight solution

It is a long term solution (30 to 50 more years)

Four Year Work Plan Projects

- **Substation Grounding Grids need to be tested and refurbished at an estimated cost of \$82,000**
- **Rebuild several miles of 3-ph small distribution conductor to larger distribution line along HWY 106 and 101 at a cost of \$297,106**
- **Rebuild 1.0 mile of 1-ph distribution line to near Whitney Point to larger distribution line at a cost of \$121,808**
- **Underground 3-ph overhead conductor to 3-ph underground cable at a cost of \$388,176**

Additional distribution items needing attention are Transformers and Meter Replacement

- **1-phase service Transformers – 252 at a cost of \$1,202,456**
- **1-phase meters – 1093 at a cost of \$173,708**
- **Replace old secondary Junction-boxes at a cost of \$50,000**
- **Install fuses, switches and distribution line improvements at an overall estimated cost of \$415,424**

More additional items planned over the four year period

- **Construct a new Skok Valley Substation up out of the valley and flood plain at a estimated cost of \$1,250,000 (depending on equipment costs).**
- **Increase capacity in the Duckabush Substation area at an estimated cost of \$1,250,000**
- **Replace regulators and install new reclosers at all Substations at a cost estimated at \$150,000**

Estimated Cost of Four Year Work Plan

2010 - \$3,426,091

2011 – \$2,199,907

2012 - \$1,196,607

2013 – \$2,129,016

\$8,571,000





SUMMARY of all the CHALLENGES

- **7.5% Rate increase by BPA**
- **Aging System 50 to 60 years old**
- **Power quality has suffered due to several decades load growth without major infrastructure investments**
- **Rates have been kept low in the past, but presently do not meet the need for required improvements**
- **Problems will become worse if they are not addressed now**
- **PUD has to accelerate efforts to resolve noted service issues**

Comparisons of Rate Impacts for Each Year

- Assumptions: Residential Customer averages 1000 KWH per month. 2010 @ 4% increase

| | <u>2009</u> | <u>2010</u> |
|---------------|----------------|----------------|
| Base Service | \$15.95 | \$16.60 |
| KWH Charge | <u>\$61.40</u> | <u>\$63.86</u> |
| Total Monthly | \$77.35 | \$80.46 |
| Tax Charge | <u>\$ 4.74</u> | <u>\$ 4.93</u> |
| Total Monthly | \$82.09 | \$85.39 |

2010 increase = \$3.30 per month

Rate Comparisons

- 2011 Rate Increase @ 4%

| | <u>2010</u> | <u>2011</u> |
|---------------|----------------|----------------|
| Base Service | \$16.60 | \$17.26 |
| KWH Charge | <u>\$63.86</u> | <u>\$66.41</u> |
| Total | \$80.46 | \$83.67 |
| Tax Charge | <u>\$ 4.93</u> | <u>5.13</u> |
| Total Monthly | \$85.39 | \$88.80 |

2011 Additional Costs = \$3.41 Per Month

Rate Comparisons

- 2012 Rate Increase @ 4%

| | <u>2011</u> | <u>2012</u> |
|---------------|----------------|----------------|
| Base Service | \$17.26 | \$17.95 |
| KWH Charge | <u>\$66.41</u> | <u>\$69.07</u> |
| Total | \$83.67 | \$87.02 |
| Tax Charge | <u>\$ 5.13</u> | <u>\$ 5.33</u> |
| Total Monthly | \$88.80 | \$92.35 |

2012 Additional Costs = \$3.55 Per Month

Rate Comparisons

- 2013 Rate Increase @ 4%

| | <u>2012</u> | <u>2013</u> |
|---------------|----------------|----------------|
| Base Service | \$17.95 | \$18.67 |
| KWH Charge | <u>\$69.07</u> | <u>\$71.83</u> |
| Total | \$87.02 | \$90.50 |
| Tax Charge | <u>\$ 5.33</u> | <u>\$ 5.55</u> |
| Total Monthly | \$92.35 | \$ 96.05 |

2013 Additional Costs = 3.70

2009-2013 Total Additional Costs = \$13.96 Per Month


2009, 2010 Rate increases

| | | |
|----------------------|-------|------|
| • Mason 3 | 3.0% | 2009 |
| • Pacific | 4.0% | 2009 |
| • Clark | 5.0% | 2009 |
| • Benton | 6.0% | 2009 |
| • Chelan | 9.0% | 2009 |
| • Ferry | 10.0% | 2009 |
| • Richland , City of | 2.0% | 2010 |
| • Grant | 4.0% | 2010 |
| • Mason 1 | 4.0% | 2010 |
| • Clallam | 4.5% | 2010 |
| • Pacific Power | 5.3% | 2010 |
| • Cowlitz | 6.0% | 2010 |
| • Douglas | 6.0% | 2010 |
| • Puget Sound Energy | 7.4% | 2010 |
| • Grays Harbor | 8.0% | 2010 |
| • Lewis | 9.4% | 2010 |
| • Seattle City Light | 13.8% | 2010 |

What's a 4% increase going to cost?

On average house hold that has 1000kWh per month will have an increase of \$3.30

What does a 4% rate increase mean to your wallet?



latte = \$4.25/day

1000kw/month = \$3.30