EXHIBIT NO. ___(JMS-4)
DOCKET NO. UE-141335
WITNESS: JASON M. SANDERS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of: **King County, Washington; BNSF Railway; Frontier Communications Northwest, Inc.; Verizon Wireless; and New Cingular Wireless PCS, LLC.** **For a Declaratory Order**	**Docket No. UE-141335**

THIRD EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF JASON M. SANDERS ON BEHALF OF PUGET SOUND ENERGY, INC.

NOVEMBER 19, 2014

PUGET SOUND ENERGY
The Energy To Do Great Things

Maloney Ridge Electrical Service Next Steps Meeting Notes

10-11:00am, Call-in 1-888-960-5962, Conf. ID: 922016

Attendees

Name	Dept	Call in	In Person	E-Mail Address
Jason Sanders	PSE		✓	jason.sanders@pse.com
Larry Berdan	PSE		✓	larry.berdan@pse.com
Rich Adams	PSE		✓	rich.adams@pse.com
Molly Reed	PSE		✓	molly.reed@pse.com
Dave Schumacher	Potelco	✓		david.schumacher@pse.com
Eric Holmgren	Potelco	✓		eholmgren@potelco.net
Denise Lorenz	Strata Inc	✓		dlorenz@statainc.com
Adelmo de la Cruz	BPA	✓		aadelacruz@bpa.gov
Ron Sallabedra	AT&T	✓		rs3418@att.com
Shirley Vangen	Verizon	✓		shirley.vangen@verizonwireless.com
Heather Campbell	Verizon	✓		Heather.Campbell3@verizonwireless.com
Marcus Wellsandt	Verizon	✓		Marcus.wellsandt@verizonwireless.com
James McPherson	Verizon	✓		James.mcpherson@verizonwireless.com
David Schultz	Verizon	✓		David.schultz@verizonwireless.com
Rob Dutcher	Frontier	✓		rob.dutcher@ftr.com
Sean Pullman	AT&T	✓		

Meeting Notes:

Welcome and Introductions – Jason Sanders

Overview:

Service to the Maloney and Sobieski communication sites is provided by approximately 8.5 miles of single phase 15kV underground cable originally trenched and plowed up the Foss River Road to the sites in 1971 or 1972. The system has had over 100 cable faults since it was originally installed. The number of outages has been increasing over the years and it is anticipated that frequency and duration will continue to increase. Weather, environmental conditions, age of the cable and splices decreases system reliability and without a replacement of the system, the cables will ultimately fail.

Project Milestones:

- **Mid-April customers have selected a maintenance option**

- End of April, PSE submits applicable permits with Forest Service based on maintenance option (Forest Service needs full summer for field investigation)
- End of year 2013/early 2014, Forest Service issues Decision Memo or Environmental Analysis for construction activities
- July 2014 Construction activities start

Questions:

Several questions were asked about the rate tariffs, current contract, the percent breakdown per customer for each option and the outage history and associated maintenance costs per year.

Attached to this pdf is:
Rate Tariffs
Contract
Percent breakdown per customer
Outage history and costs
Maloney Ridge Maintenance Estimates for each Option

The question was also asked which option PSE would recommend at this time. PSE recommends option 3 (see attached PDF of options), which replaces the 4 segments of cable with the largest number of outages. Replacing these 4 segments will increase the reliability of the whole system. PSE does want to note that the other cable segments that were not replaced now will need to be replaced at some point down the road.

At the last meeting the question was asked if the estimates could go up. The answer is yes. These estimates are only conceptual in nature at this point. All known assumptions and risks have been included. At this point no engineering has been done which makes it difficult to start too narrow down the cost. Once an option has been decided by the customers, a more refined estimate can be generated.

Maintenance Option picked by Customers:

All customers at this point indicated that they are still having internal discussions and have not decided on any option.

Next Steps:

The customers need to complete internal discussions and a discussion amongst themselves about the options and associated costs and come to an agreeable solution. Jason is going to set up another meeting mid April to discuss if an option has been selected so PSE can proceed with permitting.

Conclusion:

Jason concluded the meeting with his thanks to everyone's for their participation and patience as we work these options.

Maloney Ridge Maintenance Estimates

	Option 1
"Description"	**Silicon injection to Sobiesky and Maloney cable and Install new poly cable whole project**
Management & Engineering	$225,000
Permitting	$150,000
Materials	$250,000
Construction	$5,191,000
Subtotal CAP	$5,816,000
Construction OH's @ 20%	$1,088,200
Sales Tax 9.5%	$552,520
10% Contingency	$581,600
Rounded Total	**$8,100,000**
2013 Costs	**$810,000**
2014 Costs	**$7,290,000**

Assumptions:

Decision Memo from Forest Service

Least cost trenching method

Can cut down center of road

Can clean current splices to inject silicon

Assumes neutral is still good

Assumes replacement of 77 culverts

100% road regrade

No rock saw required

Re-use any bridge crossing

Outages will be allowed for cutovers

Road restoration beyond trench line not required

40% of excavated materials can be reused for backfill

Only 1 flagger required at base of hill

All locations are accessible by vehicle, no additonal road building required

one mob/demob

permanent road closure allowed

Not Included:

Influences on cost:

Solid Rock

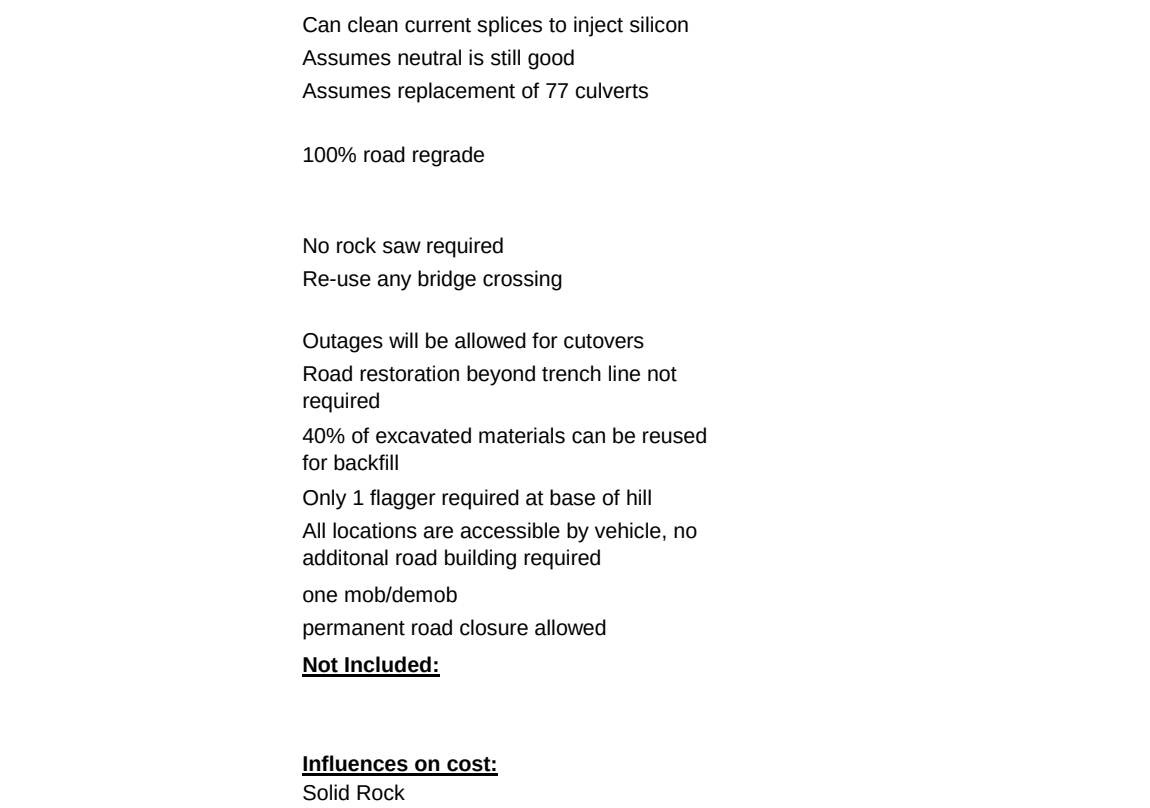
Customers to share Cost

BNSF - 1%

Maloney Association - 24%

Frontier - 24%

King County - 51%



Maloney Ridge Maintenance Estimates

	Option 2
"Description"	**Silicon injection to Sobiesky and Maloney cable and Install new poly cable down to Foss River Bridge**
Management & Engineering	$225,000
Permitting	$150,000
Materials	$250,000
Construction	$4,670,000
Subtotal CAP	$5,295,000
Construction OH's @ 20%	$984,000
Sales Tax 9.5%	$503,025
10% Contingency	$529,500
Rounded Total	**$7,400,000**
2013 Costs	**$740,000**
2014 Costs	**$6,660,000**

Assumptions:

Decision Memo from Forest Service

Least cost trenching method

Can cut down center of road

Can clean current splices to inject silicon

Assumes neutral is still good

Assumes replacement of 77 culverts

100% road regrade

No rock saw required

Re-use any bridge crossing

Outages will be allowed for cutovers

Road restoration beyond trench line not required

40% of excavated materials can be reused for backfill

Only 1 flagger required at base of hill

All locations are accessible by vehicle, no additonal road building required

one mob/demob

permanent road closure allowed

Not Included:

Influences on cost:

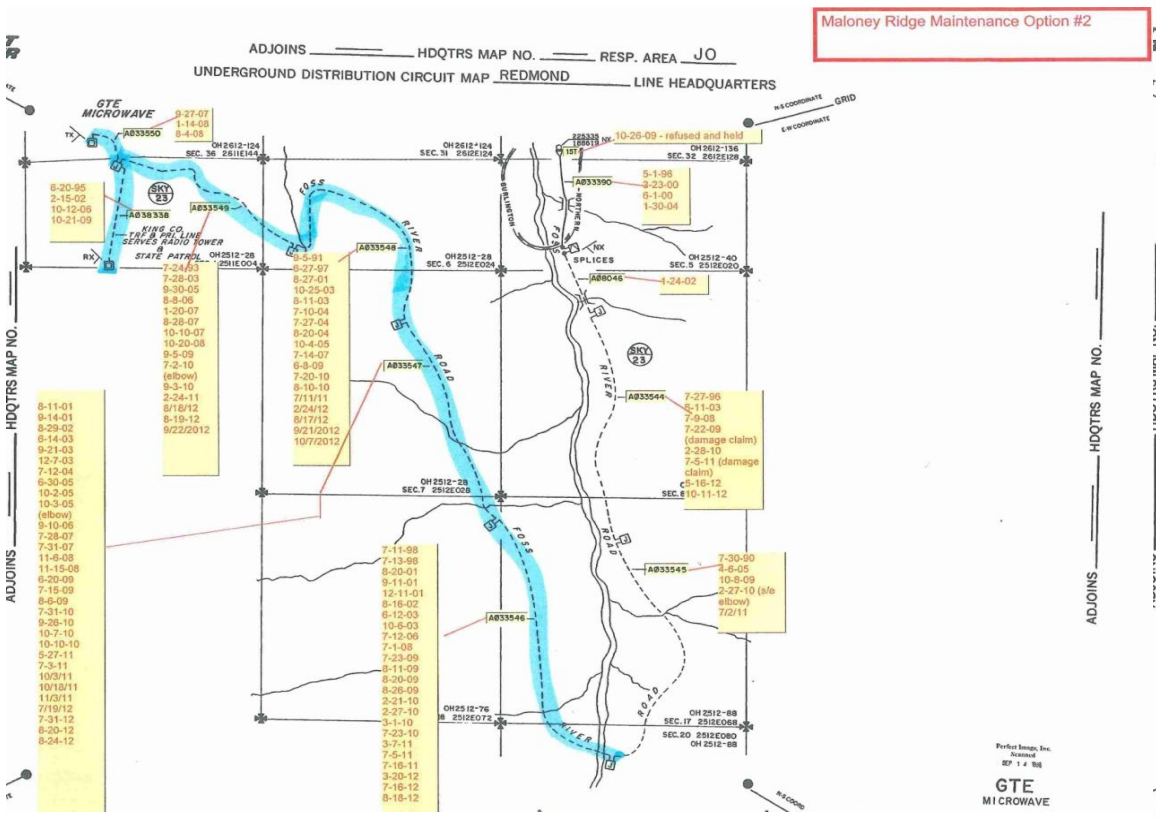
Solid Rock

Customers to share Cost

Maloney Association - 23%

Frontier - 23%

King County - 54%



Maloney Ridge Maintenance Estimates

	Option 3
"Description"	**Replace 4 worst cable Segments (33546,33547,33548,33549)**
Management & Engineering	$348,000
Permitting	$150,000
Materials	$170,000
Construction	$1,758,000
Subtotal CAP	$2,426,000
Construction OH's @ 20%	$385,600
Sales Tax 9.5%	$230,470
10% Contingency	$242,600
Rounded Total	**$3,300,000**
2013 Costs	**$330,000**
2014 Costs	**$2,970,000**

Risk/Assumptions:

Decision Memo from Forest Service

Least cost trenching method

Can cut down center of road

100% road regrade

No rock saw required

Re-use any bridge crossing

Outages will be allowed for cutovers

Road restoration beyond trench line not

40% of excavated materials can be reused for backfill

Only 1 flagger required at base of hill

All locations are accessible by vehicle, no additonal road building required

one mob/demob

permanent road closure allowed

Not Included:

culvert xings not included

Influences on cost:

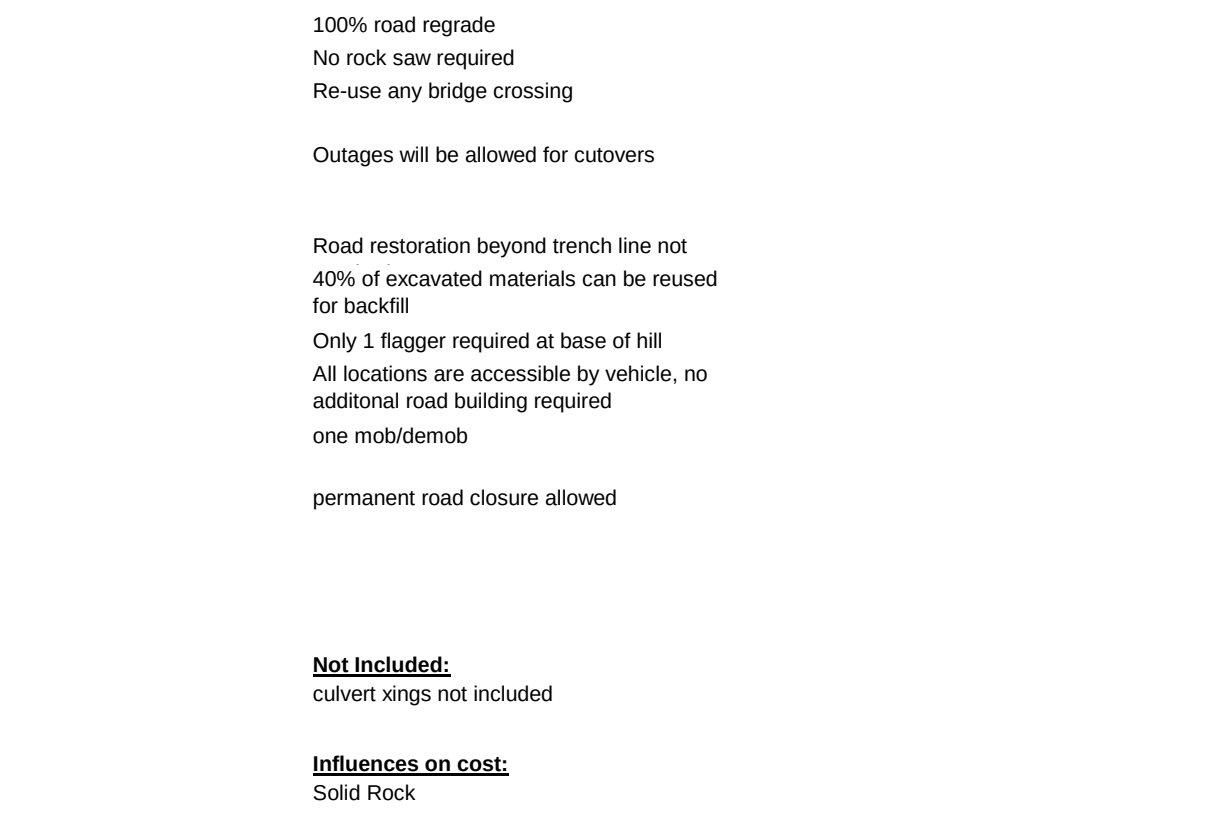
Solid Rock

Customers to share Cost

Maloney Association - 33.3%

Frontier - 33.3%

King County - 33.3%



Molly Reed
425.462.3933

Maloney Ridge Maintenance Estimates

	Option 4
"Description"	**Install new cable from Foss River Bridge to BNSF OH Pole**
Management & Engineering	$225,000
Permitting	$150,000
Materials	$200,000
Construction	$940,000
Subtotal CAP	$1,515,000
Construction OH's @ 20%	$228,000
Sales Tax 9.5%	$143,925
10% Contingency	$151,500
Rounded Total	**$2,100,000**
2013 Costs	**$210,000**
2014 Costs	**$1,890,000**

Assumptions:

Decision Memo from Forest Service

Least cost trenching method

Can cut down center of road

100% road regrade

No rock saw required

Re-use any bridge crossing

Outages will be allowed for cutovers

Road restoration beyond trench line not

40% of excavated materials can be reused for backfill

one mob/demob

permanent road closure allowed

Not Included:

culvert xings not included

Influences on cost:

Solid Rock

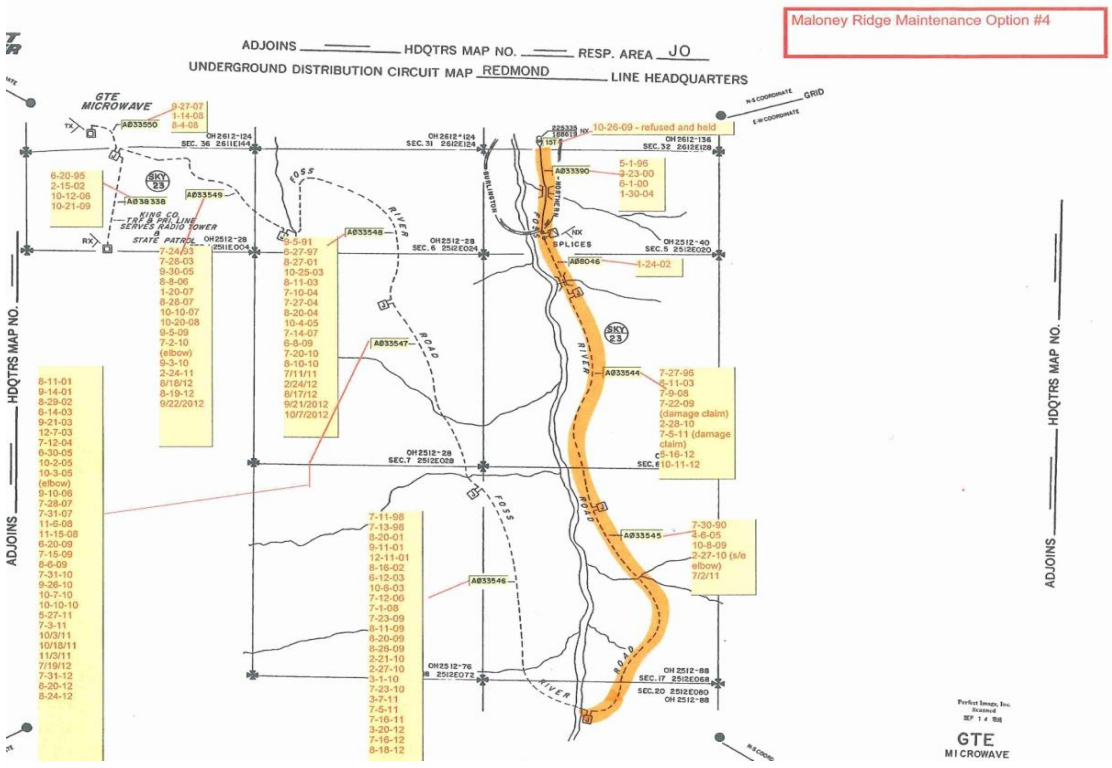
Customers to share Cost

BNSF - 6%

Maloney Association - 31%

Frontier - 31%

King County - 31%



Maloney Ridge Maintenance Estimates

	Option 5
"Description"	**Replace cables to Sobieski and Maloney (33550, 38338)**
Management & Engineering	$174,000
Permitting	$150,000
Materials	$114,000
Construction	$1,727,000
Subtotal CAP	$2,165,000
Construction OH's @ 20%	$368,200
Sales Tax 9.5%	$205,675
10% Contingency	$216,500
Rounded Total	**$3,000,000**
2013 Costs	**$300,000**
2014 Costs	**$2,700,000**

Risk/Assumptions:

No rock saw required

re-use bridge xings

outages will be allowed for cutover

permanent road closure allowed

Road restoration beyond trench line

40% of excavated material can be re-used for backfill

all locations are accessible by vehicle, no additional road building required

one mob/demob

Not Included:

culvert xings not included

No tree or stump removals

Influences on cost:

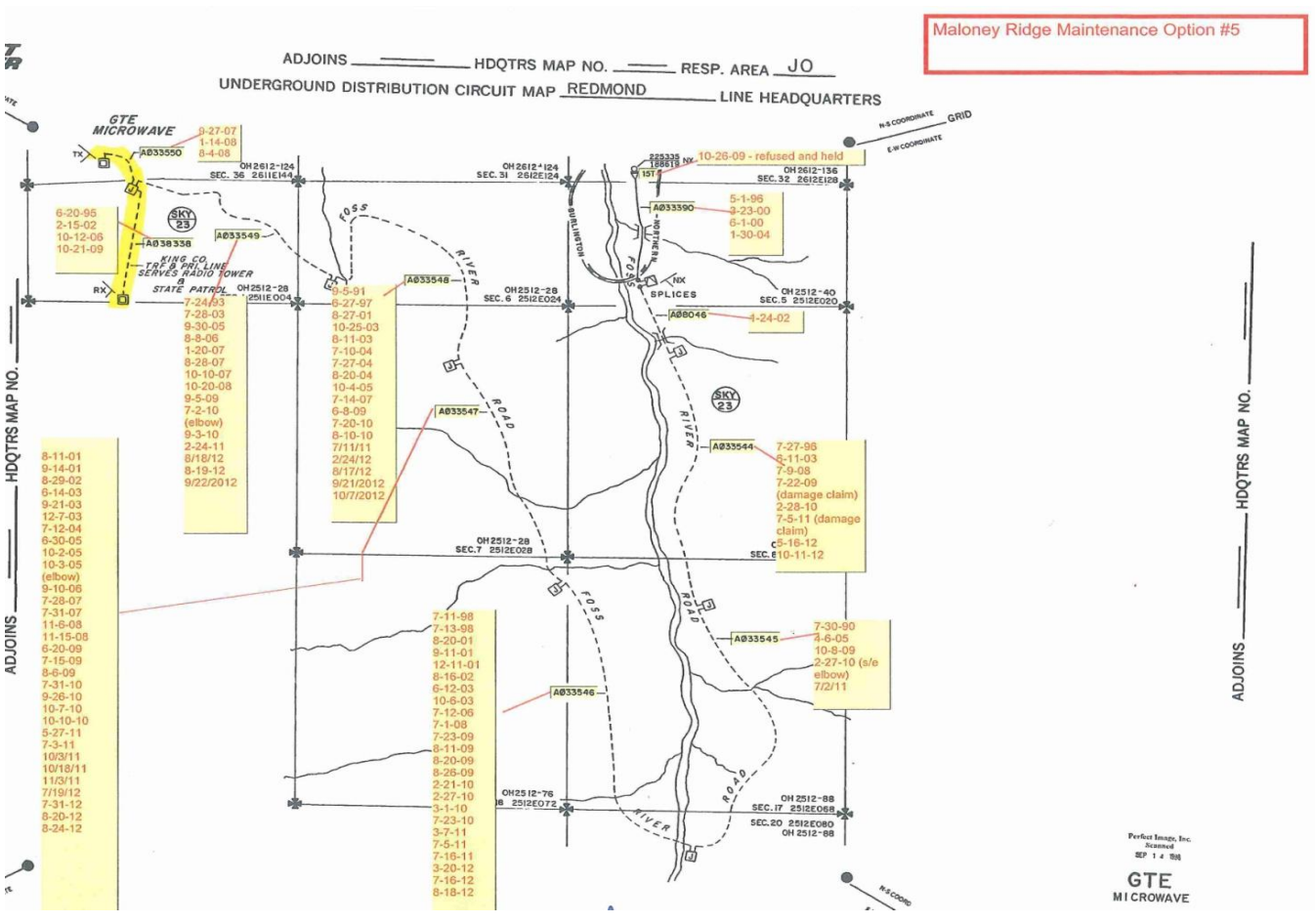
Solid Rock

Customers to share Cost

Maloney Association - 8%

Frontier - 8%

King County - 83%



Outage history for all cables				
Year	Outages by year	Cost by year	Avg cost per outage	Duration in minutes
2000	2	$ 52,140	$ 26,070	-
2001	6	$ 50,802	$ 8,467	6605
2002	4	$ 65,205	$ 16,301	3186
2003	9	$ 53,583	$ 5,954	7043
2004	5	$ 45,049	$ 9,010	6160
2005	5	$ 42,828	$ 8,566	4341
2006	4	$ 39,742	$ 9,935	4585
2007	7	$ 67,749	$ 9,678	7769
2008	7	$ 75,385	$ 10,769	6883
2009	11	$ 99,347	$ 9,032	9025
2010	15	$ 168,466	$ 11,231	10766
2011	13	$ 211,664	$ 16,282	13535
2012	18	$ 105,831	$ 5,880	14674
Total	115	$ 1,077,791		

Outage history for cables 33546, 47, 48, & 49				
Year	Outages by year	Cost by year	Avg cost per outage	Duration in minutes
2000	0	$ -		$ -
2001	6	$ 50,802	$ 8,467	6605
2002	2	$ 14,435	$ 7,217	1773
2003	8	$ 46,706	$ 5,838	5975
2004	4	$ 37,518	$ 9,379	5512
2005	4	$ 36,058	$ 9,015	3087
2006	3	$ 31,911	$ 10,637	3267
2007	6	$ 59,792	$ 9,965	6981
2008	4	$ 41,456	$ 10,364	3958
2009	8	$ 70,512	$ 8,814	5763
2010	15	$ 168,466	$ 11,231	10766
2011	12	$ 198,647	$ 16,554	12669
2012	16	$ 100,829	$ 6,302	13574
Total	93	$ 857,131		
Percent of total outages		81%		
Percent of total cost		80%