

0805

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND)	
TRANSPORTATION COMMISSION,)	DOCKET NO. UE-060266
)	
Complainant,)	DOCKET NO. UG-060267
)	
vs.)	VOLUME VII
)	Pages 805 to 995
PUGET SOUND ENERGY, INC.,)	
)	
Respondent.)	
_____)	

A hearing in the above matter was held on
September 25, 2006, from 10:00 a.m to 2:55 p.m., at 1300
South Evergreen Park Drive Southwest, Room 206, Olympia,
Washington, before Administrative Law Judge PATRICIA
CLARK and CHAIRMAN MARK H. SIDRAN and Commissioner
PATRICK J. OSHIE and Commissioner PHILIP B. JONES.

The parties were present as follows:

THE COMMISSION, by ROBERT CEDARBAUM,
Assistant Attorney General, 1400 South Evergreen Park
Drive Southwest, Post Office Box 40128, Olympia,
Washington 98504. Telephone (360) 664-1188, Fax (360)
586-5522, E-Mail bcedarba@wutc.wa.gov.

PUGET SOUND ENERGY, by KIRSTIN S. DODGE and
SHEREE STROM CARSON, Attorneys at Law, Perkins Coie,
LLP, 10885 Northeast Fourth Street, Suite 700, Bellevue,
Washington 98004, Telephone (425) 635-1407, Fax (425)
635-2407, E-Mail KSDodge@perkinscoie.com,
SCarson@perkinscoie.com.

Joan E. Kinn, CCR, RPR
Court Reporter

0806

1 THE PUBLIC, by SIMON FFITCH, Assistant
2 Attorney General, 800 Fifth Avenue, Suite 2000, Seattle,
3 Washington 98104-3188, Telephone (206) 389-2055, Fax
4 (206) 389-2079, E-Mail simonf@atg.wa.gov.

5 FEDERAL EXECUTIVE AGENCIES, by NORMAN J.
6 FURUTA, Attorney at Law, NAVFAC, 333 Market Street, 10th
7 Floor, San Francisco, California 94105-2195, Telephone
8 (415) 977-8808, Fax (415) 977-8760, E-Mail
9 norman.furuta@navy.mil.

10 INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES,
11 by S. BRADLEY VAN CLEVE, Attorney at Law, Davison Van
12 Cleve, 333 Southwest Taylor Street, Suite 400, Portland,
13 Oregon, 97204, Telephone (503) 241-7242, Fax (503)
14 241-8160, E-Mail mail@dvclaw.com.

15 SEATTLE STEAM COMPANY, by ELAINE L. SPENCER,
16 Attorney at Law, Graham & Dunn, Pier 70, 2801 Alaskan
17 Way, Suite 300, Seattle, Washington 98121, Telephone
18 (206) 624-8300, E-Mail espencer@grahamdunn.com.

19 NORTHWEST INDUSTRIAL GAS USERS, by EDWARD A.
20 FINKLEA, Attorney at Law, Cable Huston Benedict
21 Haagensen & Lloyd, 1001 Southwest 5th Avenue, Suite
22 2000, Portland, Oregon 97204, Telephone (503) 224-3092,
23 Fax (503) 224-3176, E-Mail efinklea@chbh.com.

24

25

1 -----
2 INDEX OF EXAMINATION
3 -----

4	WITNESS:	PAGE:
5	JOINT TESTIMONY OF JIM LAZAR, DONALD	
6	SCHOENBECK, and JOELLE STEWARD	
7	Direct Examination by Mr. Cedarbaum	835
8	Cross-Examination by Ms. Spencer	836
9	Examination by Commissioner Oshie	839
10	Redirect Examination by Mr. Cedarbaum	841
11	JOINT TESTIMONY OF YOHANNES MARIAM, JIM	
12	LAZAR and DONALD SCHOENBECK	
13	Examination by Commissioner Jones	845
14	DAVID E. MILLS	
15	Direct Examination by Ms. Dodge	856
16	Cross-Examination by Mr. Van Cleve	859
17	Examination by Commissioner Jones	915
18	Redirect Examination by Ms. Dodge	918
19	SALMAN ALADIN	
20	Direct Examination by Ms. Dodge	923
21	Cross-Examination by Mr. Furuta	926

22
23
24
25

0808

1 -----
2 INDEX OF EXHIBITS
3 -----

4

5	EXHIBIT:	MARKED:	ADMITTED:
6	BENCH EXHIBITS		
7	1	946	
8	2	946	
9	3	946	
10	4C	946	
11	5C	946	
12	6	946	943
13	7	946	943
14	8	946	943
15	9	946	
16	10	947	943
17	801	947	943
18	802	947	
19	803	947	
20	804	947	
21	805	947	
22	SALMAN ALADIN		
23	11C	947	924
24	12	948	924
25	13	948	924

0809

1	14	948	924
2	15	948	925
3			
	RONALD J. AMEN		
4	21	948	
5	22	948	
6	23	948	
7	24	948	
8	25	948	
9	26	948	
10	27	948	
11	28	948	
12	29	948	
13	30	949	
14	31	949	
15	32	949	
16	33	949	
17	34	949	
18	35	949	
19	36	949	
20	37	949	
21	38	949	
22	39	949	
23	40	949	
24	41	949	
25	42	949	

0810

1	43	950
2	44	950
3	45	950
4	46	950
5	47	950
6	48	950
7	49	950
8	50	950
9	51C	950
10	52	950
11	53	951
12	54	951
13	55	951
14	56	951
15	57	951
16	58C	951
17	59C	951
18	60	951
19	61	951
20	62	951
21	63	951
22	64	951
23	65C	951
24	66	952
25	67	952

0811

1	68	952
2	69	952
3	WILLIAM F. DONAHUE	
4	71	952
5	72	952
6	73	952
7	74C	952
8	75	952
9	76	952
10	77	952
11	78	953
12	79	953
13	80	953
14	JEFFREY A. DUBIN	
15	81	953
16	82	953
17	83	953
18	84	953
19	85	953
20	86	953
21	87	953
22	88	953
23	89	953
24	90	954
25	91	954

0812

1	92	954
2	93	954
3	94	954
4	95	954
5	96	954
6	97	954
7	98	954
8	W. JAMES ELSEA	
9	101HC	955
10	102	955
11	103	955
12	104	955
13	105HC	955
14	106HC	955
15	107HC	955
16	108	955
17	109	955
18	110	955
19	111	955
20	112	955
21	113	955
22	114	955
23	115	956
24	116	956
25	117	956

0813

1	118HC	956
2	119HC	956
3	120	956
4	121HC	956
5	122HC	956
6	123HC	956
7	DONALD E. GAINES	
8	131C	956
9	132	957
10	133	957
11	134	957
12	135	957
13	136C	957
14	137C	957
15	138	957
16	139	957
17	140C	957
18	141	957
19	142	957
20	143HC	957
21	144HC	957
22	145	957
23	146	958
24	147	958
25	148	958

0814

1	149	958
2	150	958
3	151	958
4	152	958
5	749	958
6	ROGER GARRATT	
7	153HC	958
8	154	958
9	155HC	958
10	156HC	958
11	157HC	958
12	158HC	958
13	159HC	959
14	160HC	959
15	161HC	959
16	162HC	959
17	163HC	959
18	164HC	959
19	165	959
20	166	959
21	167HC	959
22	168HC	959
23	KIMBERLY J. HARRIS	
24	171	960
25	172	960

0815

1	173	960
2	174	960
3	175	960
4	176	960
5	177	960
6	178	960
7	179	960
8	DAVID W. HOFF	
9	181	960
10	182	961
11	183	961
12	184	961
13	185	961
14	186	961
15	187	961
16	188	961
17	189	961
18	190	961
19	191	962
20	192	962
21	193	962
22	194	962
23	195	962
24	196	962
25	197	962

0816

1	198	962
2	199	962
3	200	962
4	201	963
5	202	963
6	203	963
7	204	963
8	THOMAS M. HUNT	
9	211	963
10	212	963
11	213C	963
12	214C	963
13	215C	963
14	216	963
15	217	963
16	218C	963
17	219	963
18	220	963
19	221C	964
20	KARL R. KARZMAR	
21	222	964
22	223	964
23	224	964
24	225	964
25	226	964

0817

1	227	964
2	228	964
3	229	964
4	230	964
5	231	965
6	232C	965
7	233	965
8	234	965
9	235	965
10	236	965
11	237	965
12	238	965
13	SUE MCLAIN	
14	241C	965
15	242	965
16	243	965
17	244C	966
18	245	966
19	246	966
20	747	966
21	247	966
22	248	966
23	249	966
24	250	966
25	748C	966

0818

1	DAVID E. MILLS		
2	251C	966	858
3	252	967	858
4	253	967	858
5	254C	967	858
6	255C	967	858
7	256C	967	858
8	257C	967	858
9	258C	967	858
10	259C	967	858
11	260	967	858
12	261	967	858
13	262C	967	858
14	263	967	858
15	264	967	858
16	265	968	858
17	266	968	858
18	267	968	858
19	268	968	858
20	269C	968	858
21	270	968	858
22	271	968	858
23	272	968	858
24	273	968	
25	274	969	915

0819

1	275	969	
2	276	969	876
3	277	969	
4	278	969	
5	279C	969	
6	280C	969	
7	281	969	W/D
8	282C	969	876
9	283C	969	
10	284C	969	876
11	285C	969	
12	286C	969	876
13	287C	969	
14	288C	969	876
15	289C	864, 969	864
16	290C	901, 969	
17		JOEL L. MOLANDER	
18	291HC	969	
19	292	969	
20	293	969	
21	294HC	970	
22	295	970	
23		ROGER A. MORIN	
24	301	970	
25	302	970	

0820

1	303	970
2	304	970
3	305	970
4	306	970
5	307	970
6	308	970
7	309	971
8	310	971
9	311	971
10	312	971
11	313	971
12	314	971
13	315	971
14	316	971
15	317	971
16	318	971
17	319	971
18	320	972
19	321	972
20	322	972
21	323	972
22	324	972
23	325	972
24	326	972
25	327	972

0821

1	328	972
2	329	973
3	330	973
4	331	973
5	332	973
6	333	973
7	334	973
8	335	973
9	336	973
10	337	973
11	338	973
12	339	973
13	340	974
14	341	974
15	342	974
16	343	974
17	344	974
18	345	974
19	346	974
20	347	974
21	348	974
22	349	974
23		
	KRIS OLIN	
24	351HC	974
25	352	975

0822

1	353	975
2	354	975
3	355HC	975
4	356HC	975
5	357C	975
6	358C	975
7	359C	975
8	360	975
9	361	975
10	CALVIN E. SHIRLEY	
11	371	975
12	372	976
13	373	976
14	374	976
15	375	976
16	376	976
17	377	976
18	378	976
19	379	976
20	380	976
21	381	976
22	382	976
23	383	977
24	384	977
25	385	977

0823

1	386	977
2	387	977
3	388	977
4	389	977
5	390	977
6	391	977
7	392	977
8	393	977
9	394	977
10	395	977
11	396	977
12	397	978
13	398	978
14	399	978
15	400	978
16	401	978
17	402	978
18	403	978
19	404	978
20	405	978
21	406	978
22	407	978
23	408	978
24	409	978
25	410	978

0824

1	411	978
2	412	979
3	413	979
4	414	978
5	JOHN H. STORY	
6	421	979
7	422	979
8	423	979
9	424	979
10	425	979
11	426	979
12	427C	979
13	428C	979
14	429C	979
15	430	979
16	431	980
17	432	980
18	433C	980
19	434	980
20	435	980
21	436	980
22	437	980
23	438	980
24	439	980
25	440	980

0825

1	441	980
2	442C	980
3	443	981
4	444	981
5	445	981
6	746	981
7	446	981
8	447	981
9	448	981
10	449	981
11	450	981
12	751	981
13	752	981
14	BERTRAND A. VALDMAN	
15	451C	982
16	452	982
17	453	982
18	454	982
19	455	982
20	456	982
21	457C	982
22	458	982
23	459	982
24	460	982
25	461	982

0826

1	462	982
2	463	983
3	464	983
4	465	983
5	466	983
6	467	983
7	468	983
8	469	983
9	470	983
10	771	983
11	772	983
12	773	983
13	ERIC M. MARKELL	
14	611HC	983
15	612	983
16	613	983
17	614	983
18	615	984
19	616	984
20	617	984
21	618C	984
22	619HC	984
23	620HC	984
24	621HC	984
25	622HC	984

0827

1	623HC	984
2	624HC	985
3	625HC	985
4	626HC	985
5	627HC	985
6		
7	MICHAEL P. GORMAN	
8	471C	985
9	472	985
10	473	985
11	474	985
12	475	985
13	476	985
14	477	985
15	478	985
16	479	985
17	480	985
18	481	985
19	482	986
20	483	986
21	484	986
22	485	986
23	486	986
24	487	986
25		

0828

1		JAMES T. SELECKY	
2	491		986
3		RALPH C. SMITH	
4	492		986
5	493		986
6		KEVIN C. HIGGINS	
7	494		986
8		DONALD W. SCHOENBECK	
9	495		986
10	496		987
11		STANLEY GENT	
12	497		987
13	498		987
14	701		987
15	702		987
16	703		987
17	704		987
18	705		987
19	706		987
20		NANCY L. GLASER	
21	499		988
22	500		988
23	501		988
24		STEVEN D. WEISS	
25	502		988

0829

1	503	988
2	504	988
3	MICHAEL L. BROSCH	
4	506C	988
5	507	988
6	508	988
7	509	988
8	ELIZABETH C. KLUMPP	
9	510	989
10	511	989
11	512	989
12	513	989
13	514	989
14	JAMES M. RUSSELL	
15	521	989
16	522	989
17	523	989
18	524	989
19	525	989
20	526	989
21	527	989
22	528	990
23	STEPHEN G. HILL	
24	531C	990
25	532	990

0830

1	533	990
2	534	990
3	535	990
4	536	990
5	537	990
6	538	990
7	539	990
8	540	990
9	541	990
10	542	991
11	543	991
12	544	991
13	545	991
14	546	991
15	547	991
16	548	991
17	549	991
18	550	991
19	551	991
20	YOHANNES K.G. MARIAM	
21	552	991
22	553	991
23	554	991
24	JOELLE R. STEWARD	
25	561	991

0831

1	562	992	
2	563	992	
3	564	992	
4	565	992	
5	566	992	
6	567	992	
7	568	992	
8	569	992	
9	570	992	
10	571	992	
11	572	992	
12	573	992	
13	574	993	
14	JOINT TESTIMONY OF JIM LAZAR, DONALD		
15	SCHOENBECK and JOELLE STEWARD		
16	581	993	835
17	582	993	835
18	583	993	835
19	584	993	835
20	585	993	835
21	586	993	835
22	587	993	835
23	JOINT TESTIMONY OF YOHANNES MARIAM, JIM		
24	LAZAR and DONALD SCHOENBECK		
25	588C	994	

0832

1	589C	994
2	590C	994
3	591C	994
4	592	994
5	593C	994
6	594C	994
7	595C	994
8	596C	994
9	597C	994
10	598	995
11	599	995
12	600C	995
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

0833

1 P R O C E E D I N G S

2 JUDGE CLARK: Good morning, welcome to the
3 home stretch of the PSE rate case. In case you were
4 either unable or unwilling to join us on Friday, or
5 Thursday I guess, Judge Moss announced that I would be
6 presiding this morning. My name is Patricia Clark, and
7 I'm an Administrative Law Judge for the Commission.

8 Our first witness actually this morning is a
9 panel, and the panel has already been seated thanks to
10 the cooperation of counsel who moved aside, and we do
11 have one attorney who will be representing the panel
12 this morning, and that is Mr. Cedarbaum on behalf of the
13 Commission Staff.

14 Ms. Steward, you may remain seated, you have
15 already been sworn in this proceeding and I remind you
16 that you remain under oath.

17 And if Mr. Schoenbeck and Mr. Lazar would
18 rise, I will swear you.

19 (Witnesses Schoenbeck and Lazar were sworn.)

20 JUDGE CLARK: Thank you, please be seated.

21 And my understanding is that the parties are
22 willing to stipulate in the testimony of the panel;
23 however, we do need to have each of you state your name
24 for the record, please, for the court reporter.

25 MS. STEWARD: Joelle Steward.

0834

1 MR. LAZAR: Jim Lazar, L-A-Z-A-R.

2 JUDGE CLARK: Thank you.

3 MR. SCHOENBECK: Don Schoenbeck,
4 S-C-H-O-E-N-B-E-C-K.

5 JUDGE CLARK: Thank you.

6 Mr. Cedarbaum.

7 MR. CEDARBAUM: Thank you, Your Honor. As
8 you indicated, we do have an agreement to stipulate in
9 the direct testimony and exhibits of this joint panel,
10 and that would be Exhibits 581 through 587. It's my
11 understanding that there are some minor corrections to
12 be made to Exhibit 581, so I would ask Ms. Steward if
13 she could please point us to those lines and page
14 numbers of that exhibit and make those corrections on
15 the record.

16 JUDGE CLARK: Thank you.

17 MS. STEWARD: Yes, they're on page 10, and
18 the first one is on line 6 where it says \$11, it should
19 say \$12.51.

20 The second correction is on line 7 where it
21 says \$6.31, it should say \$6.80, and that's all.

22

23

24

25

0835

1 Whereupon,

2 JIM LAZAR, DONALD W. SCHOENBECK,

3 and JOELLE R. STEWARD,

4 having been first duly sworn, were called as witnesses

5 herein and was examined and testified as follows:

6

7 D I R E C T E X A M I N A T I O N

8 BY MR. CEDARBAUM:

9 Q. So with those two corrections then, the
10 testimony and the exhibits are all true and correct to
11 the best of your knowledge and belief?

12 A. (Ms. Steward) Yes, they are.

13 MR. CEDARBAUM: Your Honor, at this time I
14 would offer the testimony and exhibits of this joint
15 panel, which again I think we have an agreement for
16 their admission.

17 JUDGE CLARK: All right, is there any
18 objection to the receipt of Exhibits 581 through 587?

19 Hearing none, they are received.

20 MR. CEDARBAUM: The panel is now available
21 for cross-examination.

22 JUDGE CLARK: Thank you.

23 Thanks to the efficient chart prepared by
24 Judge Moss, it indicates we only have one party
25 interested in examination, and that is Seattle Steam.

0836

1 MS. SPENCER: Thank you, Your Honor.

2 JUDGE CLARK: Thank you.

3

4 C R O S S - E X A M I N A T I O N

5 BY MS. SPENCER:

6 Q. Am I correct that your proposal allocates
7 \$576,000 in increase for the four interruptible customer
8 classes, 85, 86, 87, and 57?

9 A. (Mr. Lazar) Well, it's not quite complete, it
10 also includes the Special Contract customers within that
11 group, so it's those four plus contracts 576.

12 Q. Under your proposal, what happens to -- now
13 -- strike that.

14 Am I correct that that is premised on the
15 total gas revenue increase established by the Commission
16 as being \$39.2 Million?

17 A. (Mr. Lazar) No.

18 Q. If you would take a look at Exhibit 586.

19 A. (Ms. Steward) We're there.

20 Q. Is that the summary of the joint proposal?

21 A. (Mr. Lazar) That is an example of the
22 application of the joint proposal at one revenue level.

23 Q. Okay. And am I correct that that example is
24 at the revenue level of a \$39.2 Million increase being
25 awarded by the Commission?

0837

1 A. (Mr. Lazar) Yes, that example is at that
2 level.

3 Q. Now what happens to the \$576,000 increase
4 allocated to the four interruptible classes plus Special
5 Contracts if the Commission awards Puget less than \$39.2
6 Million in increased revenue?

7 A. (Ms. Steward) The parties have agreed that
8 these are the rates that would go into effect regardless
9 of the overall revenue requirement increase. When we
10 designed these rates, we took into consideration Staff's
11 proposed revenue requirement increase, which we knew
12 would be significantly less, would be about half of what
13 the Company's proposed. So we took into consideration
14 the range of possibilities in agreeing upon these
15 specific rates.

16 Q. And so would I also be correct in
17 understanding that if the Commission recommends or
18 establishes a lower total revenue increase for Puget,
19 all of the savings over what is shown in Exhibit 586
20 will accrue to the benefit of the firm customer classes?

21 A. (Ms. Steward) I don't know that those are
22 savings since there's -- that revenue requirement has
23 not been approved. I mean we took into consideration
24 Staff's proposed revenue requirement increase of 19.4 in
25 deciding this or in agreeing upon a rate spread and rate

0838

1 design. We have included here just for illustrative
2 purposes the Company's proposed revenue requirement
3 increase, but I don't know that I consider those savings
4 to the customers since they're not currently charged
5 those rates.

6 Q. Let me rephrase my question then. Am I
7 correct that under your proposal, if the Company is
8 awarded the \$39.2 Million, each of the customer classes
9 will receive the margin increase as shown in the set of
10 columns at the bottom of page 1 of 586 under margin
11 increase joint parties proposal? In other words, the
12 residential classes will get a \$27.5 Million increase,
13 the commercial and industrial will get a 7 or \$8.8
14 Million increase, the large volume will get a \$1.2
15 Million increase, and so forth?

16 A. (Ms. Steward) If the Commission approves a
17 \$39.2 Million increase and approves our proposed rate
18 spread, then that is the allocation.

19 Q. And if by contrast the Commission approves
20 something less than that, the actual increase for the
21 residential customers will be less than shown on your
22 exhibit, the actual increase for the commercial and
23 industrial customers will be less than shown on your
24 exhibit, same would be true of the large volume, the
25 same would be true of the compressed natural gas, but

0839

1 the interruptible customers and the Special Contracts
2 would have the same dollar increase as you have shown on
3 your exhibit?

4 A. (Ms. Steward) That is correct.

5 MS. SPENCER: That's all I have.

6 JUDGE CLARK: Thank you.

7 Let's see if there's any inquiry from the
8 Bench.

9 Commissioner Oshie.

10

11 E X A M I N A T I O N

12 BY COMMISSIONER OSHIE:

13 Q. This is a question perhaps not for
14 Mr. Schoenbeck and for Mr. Lazar and Ms. Steward,
15 Mr. Schoenbeck as well, but I wanted to get a sense from
16 the joint panel as to the customer charge for the
17 residential class proposed by Puget of \$17. That's not,
18 I don't believe it's directly addressed in your
19 testimony, so I would like to get again what's the
20 position of the joint panel with regard to Puget's
21 proposal?

22 A. (Mr. Lazar) Joint panel reached an agreement
23 on an increase to the customer charge from \$6.25 to \$7,
24 and that's our joint position. Obviously we -- there
25 are a variety of perspectives that went into our

0840

1 negotiation that led to that joint position, and I don't
2 suspect that they're all symmetrical. I mean I'm happy
3 to speak to what I brought to that discussion, and the
4 others are welcome to speak to what they brought to that
5 discussion.

6 Q. Well, I'm not sure, Mr. Lazar, that I would
7 need that personally, but I was really just interested
8 in to see if Puget's proposal had -- just to get the
9 reaction, if you will, from the panel, and I guess
10 that's what it is, that you have a \$7 charge recommended
11 in your testimony, and that's where you stand, so.

12 A. (Mr. Lazar) I mean because we're a panel and
13 because we have joint testimony, I'm not volunteering my
14 own, injecting my own perspective on that. We
15 negotiated and reached this agreement. It's a
16 significant increase from the current charge, and it's
17 less than Puget originally requested.

18 A. (Ms. Steward) I would just add that there was
19 nothing presented that would lead me to change my mind.
20 The \$17 was proposed in the rebuttal, we had already
21 agreed to our 75 cent increase, there was nothing
22 additional presented that would cause me to back away
23 from our 75 cent increase that we have agreed to.

24 COMMISSIONER OSHIE: Thank you.

25 JUDGE CLARK: Redirect, Mr. Cedarbaum.

0841

1 R E D I R E C T E X A M I N A T I O N

2 BY MR. CEDARBAUM:

3 Q. I just have a couple of questions not
4 directed to anybody in particular, but with respect to
5 the line of questioning that Ms. Spencer asked you about
6 the interruptible allocation, was the joint proposal
7 support based upon the cost of service studies that were
8 presented in this case, either the Company's or the
9 Commission basis cost of service study?

10 MS. SPENCER: Your Honor, I would object, I
11 believe that goes beyond the questions that I asked. I
12 simply wanted them to confirm how they were treating the
13 interruptible as opposed to the other classes.

14 JUDGE CLARK: Response, Mr. Cedarbaum?

15 MR. CEDARBAUM: I think the line of questions
16 was about the justification for the allocation of the
17 increase to the interruptible classes, and I'm just
18 asking questions on that line.

19 MS. SPENCER: I had some questions about that
20 but didn't ask them.

21 JUDGE CLARK: Well, I'm going to overrule the
22 objection and allow, it does go to the background and
23 basis of the testimony presented by the witnesses.

24 MS. DODGE: Your Honor, just for the record
25 PSE also objects to this line of redirect as being

0842

1 beyond the scope and essentially additional direct
2 testimony that the parties, the panel should have put in
3 its case to be rebutted.

4 JUDGE CLARK: All right.

5 MR. CEDARBAUM: My understanding is the panel
6 can answer.

7 JUDGE CLARK: That is correct.

8 A. (Mr. Lazar) We considered the results of both
9 of the cost of service studies as well as the other
10 factors that this Commission has previously ordered be
11 considered in determining rate spread, things such as
12 gradualism, perceptions of equity and fairness, and
13 other factors that the Commission in many, many orders
14 has determined are appropriate.

15 BY MR. CEDARBAUM:

16 Q. The last questions, you were asked questions
17 by Ms. Spencer about the allocation of the increase to
18 the interruptible class if the revenue requirement
19 determined by the Commission is something other than the
20 Staff proposed revenue requirement. My question is, is
21 the allocation to that class smaller or larger or equal
22 to the allocation to other classes?

23 A. (Mr. Lazar) Obviously depends on what the
24 revenue requirement is. Under our proposal, the
25 interruptible classes are assigned \$576,000 at any

0843

1 revenue level. We knew there was a range of evidence in
2 the proceeding between 19 and 39 million, and so within
3 that range, that 576 would still put the overwhelming
4 majority on the firm classes. I suppose if the
5 Commission ordered a \$700,000 increase in this case that
6 it might make sense to revisit whether assigning
7 \$576,000 of that to the non-firm customers would be
8 appropriate. But within the 19 to \$39 Million range
9 that we saw was the record before the Commission, as a
10 panel we felt that that was reasonable to assign between
11 1% and 3% of that increase to the non-firm customers.

12 A. (Mr. Schoenbeck) I'm actually feeling
13 confident that it will result in a below average
14 increase for the interruptible classes given the likely
15 revenue increase that will result from this proceeding.

16 MR. CEDARBAUM: Thank you, those are all my
17 questions.

18 JUDGE CLARK: Thank you for your testimony,
19 we'll take just a few moments off record to allow the
20 panel to be excused and to allow Mr. Mills to take the
21 stand and counsel to resume their places.

22 We're at recess.

23 (Recess taken.)

24 JUDGE CLARK: It appears that the parties
25 reached an agreement I was unaware of indicating that

0844

1 the PCA panel would be presented next rather than
2 Mr. Mills in the event there was any Commissioner
3 inquiry for that panel. There is some inquiry for that
4 panel, so they have been seated, I appreciate again the
5 indulgence of counsel in allowing us to seat them in
6 front of the Commissioners.

7 And my understanding is that Mr. Ffitch will
8 be counsel representing this panel, Mr. Ffitch.

9 MR. FFITCH: Thank you, Your Honor. The
10 testimony of the joint panel on PCA has been admitted by
11 stipulation, and we tender the panel for examination by
12 the Bench. I understand there's no cross-examination
13 identified by parties. Would you like me to have the
14 witnesses introduce themselves.

15 JUDGE CLARK: Well, the first thing I'm going
16 to do is just remind each of you, including Mr. Lazar,
17 Mr. Schoenbeck, and Dr. Mariam, have been previously
18 sworn in this proceeding, I simply remind you that you
19 remain under oath. And yes, if you can identify
20 yourselves briefly for the court reporter.

21 MR. LAZAR: I'm Jim Lazar testifying for
22 Public Counsel.

23 MR. SCHOENBECK: Don Schoenbeck testifying on
24 behalf of ICNU.

25 MR. MARIAM: Yohannes Mariam on behalf of

0845

1 Commission Staff.

2 JUDGE CLARK: All right, and we have inquiry
3 from the Bench, Commissioner Jones.

4

5 Whereupon,

6 YOHANNES K.G. MARIAM, JIM LAZAR, and

7 DONALD W. SCHOENBECK

8 having been previously duly sworn, were called as
9 witnesses herein and was examined and testified as
10 follows:

11

12 E X A M I N A T I O N

13 BY COMMISSIONER JONES:

14 Q. Good morning. As I understand -- and my
15 questions address certain parts of the proposed changes
16 to the PCA mechanism, and I will start with maybe
17 perhaps one that is agreeable to the parties. I just
18 want to confirm that the costs associated with a new
19 line of credit to support the wholesale power hedging
20 transactions, I think Mr. Mills will probably address
21 that in his testimony, did the joint parties agree that
22 the line of credit costs should be included in the PCA
23 mechanism?

24 A. (Mr. Lazar) Yes, we did.

25 Q. The next question concerns Schedule E, and

0846

1 since I'm a relatively new commissioner I would like a
2 little historical update. I Understand there's a
3 disagreement between the joint parties and the Company
4 on what is called asymmetrical treatment of the costs
5 associated with certain long-term power contracts and
6 purchase power agreements for hydroelectric resources.
7 As I understand it, it relates to the time period
8 between a GRC, a general rate case, and a -- and perhaps
9 a PCORC, a power cost only rate case, and the fact that
10 especially the coal based resources such as Colstrip
11 tend to decrease over time, at least the power costs
12 should, and there was a quid pro quo struck that certain
13 costs are not allowed to rise between rate cases. So I
14 think my first question is, what was the, in the views
15 of the joint parties, what was the "quid pro quo" that
16 was struck in 2002 when the PCA was agreed to on this
17 specific point of Schedule E resources?

18 A. (Mr. Lazar) This is addressed at the bottom
19 of page 22 of the joint testimony that there were -- the
20 cost of coal plants historically have declined as these
21 capital intensive resources have been amortized, and
22 certain other costs rise, tend to rise over time with
23 inflation and other drivers. And the original PCA
24 packaged a group of these costs together, some going up,
25 some thought to be going down, and said we're going to

0847

1 hold these constant between major proceedings. And so
2 it was really the not being able to bring the coal costs
3 down was one perspective, and certain other costs not
4 going up was the other, and they were formed together
5 into a single issue.

6 Q. So just so I understand this properly, so the
7 coal, the costs of the -- the declining costs due to the
8 depreciation of the Colstrip plants have not been
9 declining over time in the PCA baseline?

10 A. (Mr. Lazar) They stay constant between
11 general rate cases in the PCA baseline.

12 Q. I see. And how does that address the wind
13 resources, the most recently added, I won't address Wild
14 Horse but I will address the Hopkins Ridge, that was
15 added in the most recent PCORC that the Commission
16 approved?

17 A. (Mr. Lazar) The wind resources are even more
18 capital intensive than the coal resources, and so the
19 extent to which their costs will decline over time with
20 depreciation is more than that of coal. They were not a
21 part of the original negotiation, they are not a part of
22 that mechanism.

23 Q. My next questions address I think in your
24 testimony section 5 when you compare the PSE PCA to
25 Avista's ERM. As I understand your position, your

0848

1 position is basically that the power cost mechanisms for
2 different companies, they don't necessarily need to be
3 identical in their different financial metrics that the
4 Commission should look at when we compare PCA's and
5 especially the deadband and the sharing mechanisms; is
6 that correct?

7 A. (Mr. Lazar) Yes, that's correct.

8 Q. And you go through an analysis of revenue,
9 rate base, and earnings as I understand it, correct?

10 A. (Mr. Lazar) That's correct.

11 Q. And your recommendation is at the end of the
12 day -- I understand your recommendation is to leave the
13 current PCA in terms of the deadband and the sharing
14 mechanism basically in place, and could you just
15 summarize the justification of that, the basic
16 justification on a financial metrics basis of why it
17 should remain the same, is it revenues, is it earnings,
18 power rate base, or a combination of all of the above?

19 A. (Mr. Lazar) It is a combination of all of the
20 above. In the last section of the testimony on pages 27
21 and 28, we discuss if the PCA were to be updated, what
22 kind of an update would be appropriate, and increasing
23 the size of the deadband and the sharing band would keep
24 the PCA basically on the same basis that it was when it
25 was originally adopted. The Company has grown, and if

0849

1 there's no change made to the PCA, it actually shifts
2 risk to the rate payers.

3 But in section 5 of the testimony, we compare
4 it to Avista, and because of the differences between the
5 companies, the Avista ERM actually imposes a smaller
6 level of risk as a percentage of Washington earnings
7 than the Puget PCA does. And that's because Avista owns
8 more of their resources, and Puget buys more, Puget
9 rates basis is smaller compared to the revenues. And so
10 when we took that into account, the Commission had just
11 approved changes to ERM, it had imposed slightly lower
12 risks on shareholders than the current PCA mechanism as
13 a percentage of earnings, but when you look at it on
14 figure 3, it's in dollars, it's --

15 Q. That's on page 14?

16 A. (Mr. Lazar) Yes, on page 14.

17 We sort of viewed the two mechanisms, the
18 Puget PCA and the Avista ERM, as being roughly similar.
19 The Commission just approved the ERM changes, and we
20 have made a -- reached a conclusion to recommend that
21 the mechanism that has worked well for four years and in
22 which the cap was never actually had to function be
23 allowed to work now into the future as it was originally
24 designed without the cap.

25 Q. So just so I understand that last graph, I

0850

1 marked that one as well when I looked at it, the
2 maximum, let's say we go out to the 200 million
3 deviation from baseline, what this graph shows that
4 Avista will, excuse me, the Avista scaled to PSE bar
5 goes to close to 50 million, just shy of 50 million,
6 correct?

7 A. (Mr. Lazar) At a \$200 Million variation in
8 power costs, the Avista mechanism scaled to PSE's
9 revenues would impose slightly more burden on PSE
10 shareholders than the PCA does.

11 Q. And what the Company proposes just so, the
12 colors don't show up very well on my paper here, the
13 Company is proposing -- the PSE proposal is roughly 25
14 or 24 million?

15 A. (Mr. Lazar) That's correct.

16 Q. Did you, Mr. Lazar, I don't know what your
17 position was in 2002, did you support the original PCA
18 mechanism in a settlement agreement, or were you a party
19 to that?

20 A. (Mr. Lazar) I was, I participated in
21 negotiations of the original PCA on behalf of Public
22 Counsel, Mr. Schoenbeck was involved on behalf of the
23 Industrial Customers, and I believe it was Mr. Lott was
24 the lead person for the Commission Staff, he's now
25 retired.

0851

1 Q. So there was a joint --

2 A. (Mr. Lazar) All of, in that 2002 proceeding,
3 all of the parties supported an umbrella stipulation
4 that we agreed not to oppose anything in the -- all of
5 the many, many stipulations in that case, and all of the
6 parties that were interested in the PCA, including the
7 Company, Staff, Public Counsel, the Industrial
8 Customers, and I'm not sure how many others, all signed
9 on to the design of the PCA including the four year cap
10 and the deadband as it exists today and the expectation
11 that the cap would expire.

12 A. (Mr. Schoenbeck) Can I clarify that just for
13 a second just to make sure. What Jim said is correct,
14 ICNU was involved in the PCA negotiations for most of
15 the negotiations, but at the end we did not recommend
16 adopting, we did not oppose adoption of the PCA, but we
17 did not support it. There's a fine line there. There's
18 a particular aspect of the PCA we did not feel was
19 appropriate, so we did not support it at the very end,
20 but we agreed not to oppose it.

21 Q. That's an important distinction.

22 Mr. Lazar and Mr. Schoenbeck, is it fair to
23 say that this is a fairly complicated exercise of
24 running models on financial metrics based on a whole
25 bunch of different simulations of gas prices,

0852

1 electricity prices, et cetera?

2 A. (Mr. Lazar) Yes.

3 Q. Would it be fair to say that during the 2002
4 settlement that the Company was actively involved in
5 running different financial simulations of what might
6 happen?

7 A. (Mr. Lazar) I think each -- I know we did
8 simulations of what might happen, and I assume the
9 Company did as well.

10 Q. My question was, was that information shared
11 as part of the settlement negotiations freely between
12 the parties?

13 A. (Mr. Schoenbeck) I don't recall it being
14 shared, but I do recall everybody having their own
15 financial model with respect to what they felt the
16 different hydro conditions would result in different
17 amounts that could be recovered under the PCA, so I
18 think everyone had their own model doing their
19 scenarios.

20 Q. I see.

21 A. (Mr. Lazar) I know we shared our information
22 with the Company. I'm not so sure the Company shared
23 all the information they had developed with us. They
24 shared some information with us, I have no way of
25 knowing if that was all the information.

0853

1 Q. Well, my question, of course, relates to this
2 proceeding, how were the financial simulations run for
3 this proceeding by the joint parties, and was there
4 information shared with the Company, or did you just see
5 the Company's case on prefiled direct and then on
6 rebuttal?

7 A. (Mr. Schoenbeck) Well, I believe that in
8 particular that the Company supplied additional analysis
9 to go around with respect to earnings per share models
10 that we certainly used to consider and incorporated into
11 our recommendation to maintain the status quo with
12 respect to the PCA.

13 A. (Mr. Lazar) Exhibit Joint 20, which is the
14 color graph, was prepared by the Company using their
15 simulation model and was a foundation of our conclusion
16 that the current mechanism provides very good protection
17 to the shareholders and a reasonable sharing of burden
18 between shareholders and electric consumers.

19 JUDGE CLARK: Just for the clarity of the
20 record, that's 600C.

21 MR. SCHOENBECK: Apparently so.

22 COMMISSIONER JONES: And that is confidential
23 per the protective order, correct?

24 JUDGE CLARK: Correct.

25 BY COMMISSIONER JONES:

0854

1 Q. My last question on that topic concerns the
2 financial metrics. I think the Company is going to
3 assert or has asserted in the rebuttal or the
4 surrebuttal that your proposal will result in a
5 downgrade either of the credit rating or a notch or two
6 down in the credit rating; is that correct, have you
7 read the Company's response yet?

8 A. (Mr. Lazar) I have read the Company's
9 response, I think they raised that concern, I don't
10 think that they do or could assert a specific result
11 will occur.

12 Q. My question then concerns how the joint
13 parties assess the credit ratings agencies. I know it
14 could be a bit of a black box, but how do you assess the
15 credit ratings agencies and how they would react to a
16 proposal like this? Do you just look at the published
17 information, how S&P and Moody's approach questions like
18 this in the financial metrics, or do you go beyond that
19 and make some sort of subjective determination?

20 A. (Mr. Lazar) I reviewed what the credit rating
21 agencies said after the original PCA was adopted, and
22 they were very positive about the original mechanism.
23 And our recommendation is to continue the original
24 mechanism unchanged, which we demonstrate actually puts
25 a smaller burden on Puget than it did simply because of

0855

1 the growth of the company around the sharing mechanism
2 that's in the PCA. And so I would expect that the
3 positive response that we got four years ago would be
4 slightly more positive today. Obviously the rating
5 agencies look at all of the indicators of the company,
6 not just this one, and I certainly can't assert that I
7 can predict what they will do. However, you know, the
8 Company's stock has traded up since the Staff and joint
9 party testimony was filed, the market seems to be
10 responding positively to the future of the company, and
11 I can't see any reason why the rating agencies would not
12 view a continuation of this mechanism as a positive.

13 Q. Did you ever meet with a rating agency
14 analyst or did they respond, have you communicated with
15 them on any aspect of your proposal, the joint parties'
16 proposal, and the impacts it could have?

17 A. (Mr. Lazar) I have not communicated with
18 rating agencies in the context of this proceeding and
19 with respect to this company.

20 A. (Mr. Schoenbeck) Nor have I.

21 A. (Mr. Mariam) No.

22 COMMISSIONER JONES: Thank you, that's all I
23 have.

24 JUDGE CLARK: Commissioner Oshie.

25 Chairman Sidran.

0856

1 Mr. ffitch, any redirect?

2 MR. FFITCH: No redirect, thank you, Your
3 Honor.

4 JUDGE CLARK: All right, thank you for your
5 testimony. Is there any objection to these witnesses
6 being excused, any further inquiry of these?

7 All right, thank you for your testimony,
8 we'll take just a moment off record to allow everyone to
9 shuffle seats again.

10 (Recess taken.)

11 JUDGE CLARK: Ms. Dodge, will you call your
12 next witness, please.

13 MS. DODGE: Thank you, Your Honor, the
14 Company calls Mr. David Mills.

15 JUDGE CLARK: Thank you.

16

17 Whereupon,

18 DAVID E. MILLS,
19 having been first duly sworn, were called as witnesses
20 herein and was examined and testified as follows:

21

22 D I R E C T E X A M I N A T I O N

23 BY MS. DODGE:

24 Q. Mr. Mills, please state your name and title
25 and spell your name for the court reporter.

0857

1 A. My name is David Mills, M-I-L-L-S, I'm the
2 Director of Power and Gas Supply Operations for Puget
3 Sound Energy.

4 Q. Your direct and rebuttal testimonies have
5 been stipulated to by the other parties with respect to
6 admission into the record; however, I understand that
7 you have some corrections to your testimony?

8 A. Yes, I do.

9 Q. And I would like to point out that the
10 Company provided a handout this morning. We tried to be
11 efficient by putting these corrections on paper. As it
12 turns out, it appears that some of the hard copies of
13 the referenced exhibits, the lines don't exactly match
14 up, and so there could be a little confusion, and I
15 wondered if we should just take a minute to have
16 Mr. Mills explain his corrections so that everyone makes
17 sure they're finding the right spot.

18 JUDGE CLARK: All right, with respect to the
19 revisions to Mr. Mills' testimony, I believe that all of
20 those revisions were made on the copies prepared for the
21 Commissioners. Are there other parties that might have
22 some confusion? If not, I think we can move along and
23 sort of dispense with this, because the errata you
24 provided appears to be very clear. Is there anyone who
25 had confusion?

0858

1 Mr. Cedarbaum.

2 MR. CEDARBAUM: Your Honor, maybe I'm the
3 only one in the room that had some confusion on this,
4 but my page numbers didn't line up with what the Company
5 distributed on Mr. Mills' errata sheet, I'm willing to
6 take care of that off the record.

7 JUDGE CLARK: All right, if you're willing to
8 address that off the record, it would certainly save
9 some time, thank you.

10 All right, Ms. Dodge.

11 MS. DODGE: Thank you, Your Honor. The
12 Company asks that the Commission admit into the record
13 Exhibit numbers 251 through 272.

14 JUDGE CLARK: All right, without objection
15 they are received.

16 MS. DODGE: And we present Mr. Mills for
17 cross-examination.

18 JUDGE CLARK: All right, I have several
19 parties who are interested in examination of Mr. Mills
20 this morning, the first is I believe Commission Staff.

21 MR. CEDARBAUM: We have no questions.

22 JUDGE CLARK: All right, thank you,
23 Mr. Cedarbaum.

24 And the second, let's see, who else do I
25 have, ah, the lengthy one, Mr. Van Cleve.

0859

1 MR. VAN CLEVE: Thank you, Your Honor, we'll
2 certainly try to cut that estimate down.

3

4 C R O S S - E X A M I N A T I O N

5 BY MR. VAN CLEVE:

6 Q. Good morning, Mr. Mills.

7 A. Good morning, Mr. Van Cleve.

8 Q. I would first like to ask you about the
9 natural gas prices that are used in calculating the
10 Company's power costs. Is it true that the Company used
11 a three-month average of daily forward gas prices for
12 the rate year in its initial filing for the period
13 ending November 30th, 2005?

14 A. That was the initial filing, that was
15 actually updated later on in rebuttal.

16 Q. And in your July rebuttal case you used a
17 three-month average of forward prices for the rate year
18 for the period ending May 23rd, 2006?

19 A. That is correct.

20 Q. And were those same forward prices ending May
21 23rd, 2006, used for the PCORC rate increase that
22 occurred on July 1, 2006?

23 A. I show a three-month average for the '05
24 PCORC for the period ending 4-29-05 of \$6.54.

25 Q. Yeah, but I'm focusing on the date, did you

0860

1 use the same May 23rd prices in the July 1 rate
2 increase?

3 A. I would have to refer that, have to check on
4 that.

5 Q. Okay. If you could refer to your direct
6 testimony at page 41.

7 A. I'm there.

8 Q. At line 14 it says that the gas prices used
9 to forecast power costs should reflect the best
10 available, the best data available regarding gas prices
11 that will actually prevail during the upcoming rate
12 year; is that a true statement?

13 A. That's correct, that's what this says.

14 Q. And then at line 17 it says that the forward
15 market prices are the best available indicator of what
16 those prices will be; is that correct?

17 A. It specifically says natural gas prices.

18 Q. I would like to direct your attention now to
19 what's marked as Exhibit 289C.

20 MS. DODGE: The Company objects to admission
21 of 289C, we received it at 9:30 this morning.

22 JUDGE CLARK: Mr. Van Cleve.

23 MR. VAN CLEVE: Your Honor, maybe I can
24 provide some explanation and ask a question which may
25 help address the issue of this exhibit.

0861

1 BY MR. VAN CLEVE:

2 Q. Are you aware, Mr. Mills, that the Company
3 provided this weekend to the parties forward price data
4 for Sumas for 2007 that have been updated to last week?

5 A. Yes.

6 Q. And would you accept subject to check that
7 this chart is simply a graph of the data that the
8 Company provided this weekend?

9 MS. DODGE: Company objects to that subject
10 to check as unduly burdensome and an inappropriate use
11 of the subject to check device.

12 MR. VAN CLEVE: Well, Your Honor, this is
13 simply a graph of data that the Company provided this
14 weekend, I think the Company can easily verify whether
15 the chart is accurate. And if it isn't, they can
16 certainly replace it with their own chart.

17 MS. DODGE: Your Honor, we actually have the
18 Company's chart, and we would not object to this line of
19 questioning going forward on the data the Company
20 provided rather than their snapshot of portions of that
21 data.

22 JUDGE CLARK: All right, so you would like to
23 supplement 289C with the underlying data or replace?

24 MS. DODGE: Replace it.

25 JUDGE CLARK: All right, Mr. Van Cleve.

0862

1 MR. VAN CLEVE: I have no objection to
2 supplementing, Your Honor.

3 JUDGE CLARK: But you have an objection to
4 replacing?

5 MR. VAN CLEVE: Yes.

6 JUDGE CLARK: Okay, with respect to the
7 subject to check objection, I think that that will be
8 rendered moot by supplementing Exhibit 289C with the
9 underlying data, and I think that you're going to have
10 to have a little more foundational inquiry regarding the
11 basis of the exhibit before I have sufficient
12 information to rule on the exhibit itself.

13 MR. VAN CLEVE: Can we go ahead and get the
14 information which is going to be used to supplement the
15 exhibit?

16 JUDGE CLARK: We can.

17 And do you have sufficient copies to
18 distribute to everyone?

19 MS. DODGE: Yes, I do.

20 JUDGE CLARK: All right, this might be an
21 appropriate time then for approximately a ten minute
22 recess to distribute those copies and give everyone an
23 opportunity to review it.

24 We're at recess until about 11:00 a.m.

25 (Recess taken.)

0863

1 JUDGE CLARK: All right, Mr. Van Cleve.

2 MR. VAN CLEVE: Your Honor, we are willing to
3 replace the chart that the Company handed out with the
4 chart that we had for 289C.

5 JUDGE CLARK: All right. And I will note
6 that although this document is not duplicated on yellow
7 paper, it does contain data that was already designated
8 as confidential by ICNU, and it should be considered
9 confidential although it's on white paper.

10 With the replacement of the exhibit,
11 Ms. Dodge, is your objection eliminated?

12 MS. DODGE: It is as to the partial nature
13 and the need to check the Exhibit 289 that was provided
14 this morning.

15 However, the Company does have one other
16 objection to raise, and that is that the reason that
17 this document was provided to ICNU over the weekend was
18 because the parties are in settlement discussions, and
19 it was provided in the course of settlement discussions.
20 And while we will not ask that this not be put into the
21 record for that reason, the Company believes that's
22 inconsistent with the procedural rules of the Commission
23 and would tend to chill free and frank settlement
24 discussions to have this kind of surprise on the morning
25 of hearing with data that has been provided in

0864

1 settlement discussions.

2 JUDGE CLARK: Mr. Van Cleve, is that the
3 source of the document?

4 MR. VAN CLEVE: Your Honor, we were provided
5 with this over the weekend, it was E-mailed to
6 Mr. Schoenbeck. We had asked for an update of the gas
7 prices to current, and we were having -- we had some
8 limited settlement discussions with the Company in the
9 last few days, we do not believe that gas price data can
10 be rendered unusable by the fact that we were also
11 having settlement discussions, and I understand that the
12 Company is not objecting to the document.

13 JUDGE CLARK: All right, I am going to allow
14 it, and the Commission will determine the appropriate
15 weight, if any, to give to this document.

16 With that ruling I do not want in any way to
17 encourage the parties to use settlement negotiations to
18 obtain documents to be later used in the course of an
19 adjudicative proceeding or an adjudicative context.

20 And you should take the Exhibit 289C which is
21 yellow, set it aside, and we will be using Exhibit 289C
22 that is on the white paper.

23 Mr. Van Cleve.

24 BY MR. VAN CLEVE:

25 Q. Referring to Exhibit 289C, Mr. Mills, can you

0865

1 explain to us what this document depicts?

2 A. Yes, I can. This document reflects both the
3 daily forward marks, and this is all pursuant to the
4 January '07 through December 2007 time frame, natural
5 gas forward marks at Sumas. The line that has all the
6 volatility would be the daily forward marks for that
7 time frame. The dark line, again on a black and white
8 copy, just the dark line represents a three-month
9 rolling average.

10 While we were in recess, I did have a chance
11 to check on the question that you asked earlier with
12 respect to the PCORC supplemental price, that price was
13 actually \$7.13 for the three months ended April 28, but
14 I need to point out that that's for a different time
15 frame. The PCORC was looking at the July 2006 through
16 December 2006 time frame, whereas this Exhibit 289C is
17 looking at the calendar year 2007.

18 Q. Would you agree that the forward market price
19 for 2007 has declined dramatically in the month of
20 September?

21 A. I would agree that it's declined. I think
22 the volatility in this market, we're redefining terms
23 like dramatic every day. I would agree that it has
24 declined.

25 Q. And the current forward market price for 2007

0866

1 is below \$7 according to the chart; is that correct?

2 A. Again you're looking at the Sumas daily, that
3 is -- that would be correct.

4 Q. And --

5 A. But again for these proceedings we have used
6 a three-month rolling average as approved by the
7 Commission in the '04 rate case.

8 Q. Can you give us an idea of the magnitude of
9 the impact on power costs of say a \$1 decline in the
10 price of natural gas?

11 A. It's very difficult to do that because of the
12 complexity of the Aurora model, which is the model that
13 models the variable costs, I should say the fixed costs,
14 but -- because it's not just a direct offset. As gas
15 prices move one direction or another, you're not going
16 to get a linear or a ratable increase or decrease in
17 overall power costs. Two reasons for that. One is that
18 there's other costs that are always changing throughout
19 time, but the modeling cost has to do, a model
20 consideration, which has to do with a very complex mark
21 to market calculation, and what this does is it adjusts
22 and either provides a credit or a debit onto the overall
23 power costs as current market, in this case the
24 three-month rolling average, is applied to our existing
25 transactions.

0867

1 Simple example, we have a number of gas
2 transactions for combustion turbine, let's say they're
3 at \$3, the credit when the market is at \$9 is much
4 higher than the credit would be at the market at \$8, and
5 that needs to be accounted for. And that again would be
6 an offset to the direct reduction in gas prices that one
7 might expect just as an artifact of putting in new lower
8 gas prices.

9 Q. Do you have any kind of rule of thumb that
10 you use for determining the impact on power prices of
11 changes in gas prices?

12 A. No, not off the top of my head. Again,
13 because of the complexity of it, it would be folly on my
14 part to try to apply a rule of thumb.

15 Q. Referring to your direct testimony, which is
16 Exhibit 251C, page 42, line 8.

17 A. I'm there.

18 Q. You state that forward market prices quickly
19 become stale in their predictive power with respect to
20 actual future prices decreases; is that correct?

21 A. That's correct, that's what it says here,
22 yes.

23 Q. Given the recent changes in the natural gas
24 price, do you think that the prices from the March
25 through May period that you used in the rebuttal case

0868

1 have become stale?

2 A. We have had a move in the market, we have had
3 a move downward, and I'm reluctant to apply definition
4 terms like stale. I will tell you that the Company is
5 not opposed to updating the power costs with new marks.
6 And, in fact, that's one of the reasons why we have
7 tried to present a sound case on the PCA for a 50/50
8 sharing band. In that example, it would motivate both
9 parties, the Company and other parties, for frequent
10 updates. And I think this is a great example, this
11 market move, as to why frequent updates and a 50/50
12 sharing band, in this example the rate payers would have
13 been able to, you know, under a 50/50 no deadband
14 scenario, the rate payers would be participating in this
15 upside, or I should say downside market move.

16 Q. Based on that answer, do you think it would
17 be appropriate for the Commission to require the Company
18 to update the gas costs in November for the rate year?

19 A. That's not my decision to make.

20 Q. Do you have an opinion about the factors
21 which are driving the forward natural gas prices down?

22 A. Yes.

23 Q. And what are those factors?

24 A. Well, we basically ended the summer period,
25 which for the East Coast and a large degree of the

0869

1 southwest natural gases the fuel only margin for
2 electric generation, that cooling or air conditioning
3 demand during heat waves drive up power for gas
4 consumption. We have also skated through, as compared
5 to last year, we have been very lucky in avoiding
6 hurricanes in the Gulf of Mexico in the producing
7 regions. I think the combination of those two plus a
8 natural gas storage what we will call an overhang, I
9 believe we're at about nationally 300 billion cubic feet
10 of storage above where we are on a five year average. I
11 think all of these events have combined to drop this.
12 The other thing I might add though, and it's rather
13 newsworthy over the last few weeks, is this kind of
14 decline has taken a few of the hedge funds out. It
15 makes you, as a trader, it makes you wonder, you know,
16 what additional kind of volatility that activity is
17 bringing into the marketplace.

18 Q. Thank you.

19 I would like to focus now on the adjustments
20 that the joint parties proposed to the Aurora results,
21 and I think there's four adjustments that the joint
22 parties proposed. The first had to do with adding a
23 couple of new plants to the database and updating some
24 capacity ratings. Is that an adjustment that the
25 Company is in agreement with?

0870

1 A. I believe that we did adjust the Aurora
2 database upward of 280 megawatts for that additional
3 generating capacity.

4 Q. So the answer is yes?

5 A. Yes.

6 Q. The other adjustments that were proposed to
7 the Aurora results were to the minimum up and down times
8 for gas fired plants; is that correct?

9 A. That's correct.

10 Q. And there was also a proposed adjustment for
11 the hydro shaping factors, which is the amount of hydro
12 energy that is in the on peak hours as compared to the
13 off peak hours; is that correct?

14 A. That is correct.

15 Q. Focusing first on the issue of minimum, well,
16 let me ask you first about the Aurora model itself. In
17 your rebuttal testimony at page 10, line 21, you talk
18 about the fact that Aurora is a standardized model
19 that's widely used in the Northwest; is that correct?

20 A. That's correct.

21 Q. And do the utilities all use the same version
22 of the Aurora model?

23 A. I can't speak to the different versions that
24 might be in use between the different companies, nor can
25 I speak to the date of the most recent input data set

0871

1 for the WECC generated data that each company might be
2 using. This statement is intended to infer that the
3 structure itself of a fundamental based model such as
4 Aurora is in very common use and application in the
5 Northwest.

6 Q. At line 16 of your rebuttal testimony, I'm
7 sorry, at page 16 of your rebuttal testimony, line 15,
8 you state that the Company received an update to the
9 Aurora database from the vendor in June 2006?

10 A. That's correct.

11 Q. But that update wasn't used in the case?

12 A. It was not used in the initial filing because
13 we did not have the data set at that point when we
14 filed. It was though, however, used in our supplemental
15 filing. And there were, to that database, there were a
16 number of other adjustments that the Company made.

17 Q. Can you explain what the minimum on and off
18 time for gas fired plants is as it concerns the Aurora
19 model?

20 A. Again Aurora is a fundamental based market
21 model that generates monthly and annual, or I should say
22 monthly and hourly power prices for the entire Western
23 Energy Coordinating Council, that would be the entire
24 Western interconnect, uses gas prices as an input, has
25 hydro dispatch logic, single dispatch hydro resources of

0872

1 WECC in individual areas to load. It will then attempt
2 to dispatch through a combustion turbine logic, take
3 combustion turbines in the WECC and by subarea to price.

4 The minimum on and off times generally in the
5 industry, these turbines, they're all very different,
6 they're all -- take a sample. They're as different as a
7 sample of the number or -- as the type and number of
8 cars in the parking lot in terms of both their
9 manufacturer and models, but also even the same
10 manufacturer and model will have different operating
11 characteristics and react differently to the cycling
12 times, and that has to do with this minimum on and off.

13 Q. And how does the specification of the minimum
14 on and off times for these plants impact the Aurora
15 results?

16 A. Well, for the non-Puget owned assets in this
17 case, the non-Puget owned or contracted combustion
18 turbines, we rely on EPIS for that data set. Turbines,
19 the combustion turbines dispatch logic data fields,
20 there are 96 data points, 96 data entries. Minimum on
21 and off time are only 2. We rely on EPIS to maintain
22 that database, as you can tell from the June 2006
23 database update. We also have long discussions with the
24 EPIS folks, who are the owner of the Aurora model, and
25 the fact that they are confident in those input fields

0873

1 that come in the off-the-shelf database, they're
2 confident in the sense that they in fact back test that
3 logic and those input parameters against prices that
4 actually occur.

5 Q. But my question was changing the minimum on
6 and off times, how does that impact the result in
7 Aurora?

8 A. It's going to be very situational dependent.
9 I will tell you that the way the turbine logic operates
10 in Aurora, if there is say a 16 hour minimum run time,
11 the Aurora model will dispatch that unit as long as it
12 is economic to do so over that time period.

13 Q. Referring to page 12 of your rebuttal
14 testimony, you indicate at line 19 that PSE modifies
15 some of the base data sets for your own resources; is
16 that right?

17 A. I'm sorry, what page, what line are you on?

18 Q. I'm on the sentence that begins at line 19 on
19 page 12.

20 A. Yes, that's correct.

21 Q. And why is it that you modified the Aurora
22 data set for your own resources?

23 A. We are more cognizant and aware of the
24 variable operating and maintenance charges. Again, the
25 Aurora data set has a fairly generic variable operation

0874

1 and maintenance cost assigned. We have real world
2 operating experience and costs that have been incurred.
3 We are also aware of any limitations with respect to
4 emissions that would govern the output. We also have
5 information and experience with any startup charge that
6 might be allocated or charged to us from cycling the
7 plant more frequently than the long-term service
8 arrangement between the Company and the service
9 providers might provide. I might also add that's a
10 reason that we are reluctant to go into the EPIS
11 database on a WECCwide basis. We just -- we do not have
12 the knowledge or the wherewithal to update 96 data
13 fields for some 25,000 megawatts of combustion turbine
14 generation. Again, I have just illuminated some of
15 those data fields, startup costs, variable O&M,
16 emissions limitations, and the like.

17 Q. Could you please refer to Exhibit 276, which
18 is a cross-examination exhibit. And if you refer to the
19 second paragraph of the response, it states that the
20 Company didn't make any modifications to the minimum on
21 and off times except for the resources included in PSE's
22 resource portfolio. So why did you change the minimum
23 on and off times for your own resources?

24 A. I believe the rest of the sentence says we
25 did not make any modifications to the minimum off times

0875

1 for the turbines, and then third and fourth sentence,
2 except for those resources included in PSE's resource
3 portfolio.

4 Q. So you did change the minimum on and off
5 times for your own resources?

6 A. Yes, I believe we did.

7 Q. And why was that?

8 A. Again, we have very granular knowledge and
9 experience with the turbines in our combustion turbine
10 fleet. We are cognizant and aware of the contractual,
11 the long-term service arrangement agreements that exist
12 between the Company and the service providers for these
13 units. Many of our units we have come to know and love
14 them and maintain them on a what I will call conditional
15 based maintenance program. It's just when you buy a new
16 car, for the first 30,000 miles you're real rigorous
17 about taking it to the shop and getting that service
18 check. After about 30,000 miles, the car starts to tell
19 you what service and what issues it may have. Number of
20 Puget's turbines, Frederickson 1 excluded, I would
21 assert exhibit that condition based maintenance cycle.
22 The knowledge of that type of information as well as the
23 emission limits that the Company operates those turbines
24 under as well as the types of fuel that those turbines
25 may be required to operate under, those all go into

0876

1 assessing and resetting the minimum start and or run
2 times I should say for the turbines.

3 MR. VAN CLEVE: Your Honor, I request
4 admission of Exhibit 276.

5 MS. DODGE: No objection.

6 JUDGE CLARK: All right, Exhibit 276 is
7 received.

8 Are there any other data requests that we can
9 stipulate in rather than running through them
10 individually?

11 MS. DODGE: The Company will stipulate in
12 Exhibit 276, 284, 286, 288, and 282 just with a brief
13 colloquy about that, which is that last week ICNU
14 provided a replacement Exhibit 282 which included the
15 entirety of the attachments to PSE's response to Joint
16 Data Request Number 15, those attachments included a
17 complete copy of what had been marked as Exhibit 281,
18 which was just an excerpt, so I believe 281 falls away,
19 and then we would stipulate to 282.

20 JUDGE CLARK: Mr. Van Cleve.

21 MR. VAN CLEVE: We would agree with that,
22 Your Honor.

23 JUDGE CLARK: All right, then Exhibits 276,
24 282, 284, 286, 288, all confidential, are received, and
25 Exhibit 281 is withdrawn.

0877

1 And you can proceed with your examination.

2 BY MR. VAN CLEVE:

3 Q. If you could refer to Exhibit 279C, please.

4 A. I'm there.

5 Q. Do you recognize this as a list of some of
6 the generating resources which are included in the
7 Aurora database, and the source of this material is
8 referenced on the second page, it's Attachment A to 133,
9 which is Exhibit 276?

10 MS. DODGE: Your Honor, PSE objects to
11 Exhibit 279. It's an incomplete snapshot, excerpts of
12 the EPIS database with some errors in it, and in
13 addition it's new evidence. The Aurora database has
14 been available to ICNU since last February. It was also
15 if you note on Exhibit 276, it was provided on June 9th
16 in this case in its entirety, and it could have been
17 made or any permutation on it that ICNU desired could
18 have been put into the response case, which would have
19 enabled PSE to look at it closely and rebut it.

20 JUDGE CLARK: Mr. Van Cleve.

21 MR. VAN CLEVE: Your Honor, this is an
22 excerpt from the attachment to a data response that the
23 Company provided, and Mr. Schoenbeck informs me that
24 it's an access database that's 100 megabytes, so we
25 simply pulled out the minimum on and off times for these

0878

1 plants that are in Aurora. The Company has had this as
2 a cross exhibit since last week, I don't think it would
3 be practical to reproduce, practical and not useful to
4 reproduce the entire access database, but this is
5 information provided by the Company that reflects their
6 database that's used to calculate power costs.

7 MS. DODGE: And, Your Honor, just a brief
8 response, this would not be cured by production of the
9 entire EPIS database. In this particular case the
10 Company's point is that it is a very large database, and
11 ICNU could have provided whatever snapshot it liked as
12 part of its response testimony and arguments, in which
13 case we could have been in a position to check it and
14 rebut it. But as an incomplete snapshot brought in as a
15 cross exhibit it simply distorts facts.

16 JUDGE CLARK: All right, the objection is
17 sustained. Reviewing Exhibit 276, it appears that this
18 was responded to on June 9th, 2006, and an appropriate
19 alternative would have been to address this information
20 in responsive testimony.

21 MR. VAN CLEVE: Your Honor, we did in fact
22 provide very similar information as an attachment to the
23 Joint Parties' testimony, so I would refer the witness
24 to Exhibit 590C.

25 JUDGE CLARK: Do you have a copy of that

0879

1 document, Mr. Mills?

2 THE WITNESS: I do not.

3 JUDGE CLARK: Do you have that now,

4 Mr. Mills?

5 THE WITNESS: I have it.

6 JUDGE CLARK: Do you need a moment to review?

7 THE WITNESS: No.

8 MS. DODGE: Your Honor, PSE just objects at
9 this point that this was not provided as a cross-exam
10 exhibit for this witness, so although PSE had the
11 opportunity to look at the proposed 279 to determine
12 whether there were errors and in fact identified some,
13 this is a little bit on the fly for the witness at this
14 point.

15 JUDGE CLARK: Well, I understand that, but
16 Exhibit 590 is in the record and was received, that's
17 why I was asking the witness if he had had an adequate
18 opportunity to review. And if you have not been given
19 that, then we might consider something like an early
20 lunch to give you the opportunity to do that.

21 THE WITNESS: I would like to take that time
22 to review this, yes.

23 JUDGE CLARK: All right, one moment.

24 (Discussion on the Bench.)

25 JUDGE CLARK: Okay, we have two options here.

0880

1 We can either take lunch now and reconvene at 1:00, the
2 other option is, Mr. Van Cleve, if you have a line of
3 inquiry that you can pursue and complete in the next 30
4 minutes, we can come back to this one after lunch. Do
5 you have a preference? I would like to hear from both
6 Ms. Dodge and Mr. Van Cleve regarding your preference.

7 MS. DODGE: We're willing to proceed on other
8 lines for now.

9 JUDGE CLARK: Mr. Van Cleve.

10 MR. VAN CLEVE: I do have another line that I
11 could pursue, Your Honor.

12 JUDGE CLARK: Thank you.

13 BY MR. VAN CLEVE:

14 Q. Mr. Mills, I would like to talk for a minute
15 about the hydro shaping adjustment. The joint parties
16 have proposed that more of PSE's hydro energy be shaped
17 into the on peak hours and less in the off peak; is that
18 correct?

19 A. That is the recommendation or proposal, yes.

20 Q. And referring to your rebuttal testimony at
21 page 23, lines 13 to 16, your argument against that
22 adjustment is that it disregards how the hydro system is
23 managed; does that sum up your objection?

24 A. Yes.

25 Q. And you also argue that it didn't consider

0881

1 the historical shape of the Mid-C generation; is that
2 right?

3 A. Of the Mid-C generation, that's correct.

4 Q. Isn't it true that the proposal of the joint
5 parties is based on the Company's own position and
6 exposure report?

7 A. Yes, but I need to point out that the
8 exposure report is generated from our risk model.
9 Again, our risk model is a production cost model basis
10 that is intended to optimize the short-term portion of
11 our portfolio for load serving purposes. And as a
12 result, that model nor virtually any other model I'm
13 familiar with is adequate or does an adequate job in
14 modeling the operating the supplemental reserves that we
15 have to carry on the Puget system. These are mandated
16 NERC requirement operating reserves. And because of the
17 flexibility of our Mid-C assets, our Mid-C contracts,
18 that is where historically Puget carries our operating
19 and supplemental reserves. Basically this is we're
20 talking about unloaded generation that can respond
21 instantaneously to meet aberrations in the system.

22 Q. You would agree that the position report
23 shows more on peak hydro than the Aurora output,
24 correct?

25 A. That is correct. Again though I will go back

0882

1 to my previous statement, Aurora will dispatch hydro for
2 load without regard to price, and the risk model will
3 dispatch hydro with respect to price. But neither model
4 have specific fields that address the reserve carrying
5 requirements.

6 Q. Does the Company use the availability factors
7 in the position report to determine its own market
8 purchases?

9 A. In the risk model yes, yes, we do.

10 Q. Would you agree that for 2005 that the
11 Company's Mid-C contracts provided about 23% of the
12 Company's energy generation?

13 A. Of the total generation?

14 Q. Yes.

15 A. I believe that's correct.

16 Q. And the non-Mid-C hydro was about 4%?

17 A. By non-Mid-C hydro, you're talking about
18 company owned?

19 Q. Correct.

20 A. That number I don't know that I agree or have
21 a better number to replace it with at this point.

22 Q. Would you agree subject to check that the
23 Company's annual report for 2005 showed that the Company
24 owned hydro was 3.7% of energy for 2005?

25 MS. DODGE: Objection, this is not an

0883

1 appropriate subject to check, this is now referring to a
2 document that has not been put into evidence or provided
3 to the witness to look at.

4 MR. VAN CLEVE: Your Honor, I'm just trying
5 to get the relative company owned versus Mid-C hydro
6 generation. It's in the Company's annual report, it
7 seems like it would be fairly easy for the witness to
8 check it.

9 JUDGE CLARK: Ms. Dodge.

10 MS. DODGE: The appropriate procedure on
11 something like this would be to provide it as a cross
12 exhibit and refer to the exhibit. Subject to check is
13 meant for calculations.

14 JUDGE CLARK: Do you have a copy of the 2005
15 annual report to which you are referring, Mr. Van Cleve?

16 MR. VAN CLEVE: Yes, I do, Your Honor.

17 JUDGE CLARK: All right, I think that it
18 might be appropriate then to provide that to the witness
19 and allow him to review, which gets us into the same
20 arena we were already in with the witness needing to
21 review another document, so do you have further inquiry
22 that you can go to?

23 Mr. Mills, do you need time to review?

24 THE WITNESS: Yes, I do, as it appears that
25 we might be mixing and matching peak or capacity with

0884

1 average energy.

2 JUDGE CLARK: All right.

3 BY MR. VAN CLEVE:

4 Q. Are the dams that support PSE's Mid-C
5 contracts run of river, meaning that they don't have
6 their own storage?

7 A. That is technically correct, but as part of
8 the Pacific Northwest Coordination Agreement, all of the
9 Mid-C participants have access to a very limited what we
10 call a composite pond, and basically what this does is
11 you're able to carry either a positive reservoir
12 elevation or carry a negative reservoir elevation in the
13 sense that all the parties involved in the coordination
14 agreement that some basically asked equal to zero, the
15 amount of water we're talking about here is very small
16 relative to the federal Columbia River hydro system.

17 Q. If you can refer to your rebuttal testimony
18 at page 25, at line 29 it indicates that the, well, the
19 whole starting at line 20 indicates that Grand Coulee is
20 the principal storage reservoir on the federal system,
21 correct?

22 A. That is correct.

23 Q. And that PSE is directly impacted by BPA's
24 daily and hourly operating decisions, correct?

25 A. That's correct.

0885

1 Q. And that this severely limits PSE's ability
2 to independently manage hydro operations on the Mid-C
3 projects, correct?

4 A. Correct.

5 Q. So does the BPA's operation of the Grand
6 Coulee project determine in large part how much of the
7 energy that you receive from Mid-C projects is in the on
8 peak hours?

9 A. The federal Columbia River hydro system is
10 generally operated as an integrated system, including 31
11 hydro development assets on main stem Columbia, Snake,
12 and the Willamette systems. Grand Coulee happens to be
13 what I would call the crown jewel of the federal system,
14 both with respect to its storage capacity as well as its
15 generating capability.

16 I think maybe a simple example here might be
17 illustrative. Assuming that the federal system, in this
18 case Bonneville, was attempting to optimize the Grand
19 Coulee generation, they have the same motivations as the
20 Company both with respect to optimizing the value of the
21 water as well as carrying reserves. But assuming that
22 they're managing their system based on Grand Coulee
23 alone, the heavy load hour period begins at 7:00 a.m.
24 and ends at 10:00 p.m. That means that Bonneville would
25 generally start charging, what we call charging, putting

0886

1 water through Grand Coulee at the bottom of the hour, so
2 about 6:30, to ramp up generation. Coulee has a fairly
3 fast ramp. So as they come into the 7:00 a.m. hour for
4 the on peak or the heavy load hour, they're at full
5 capacity. Chief Joe is effectively, the next project
6 downstream, Chief Joe, is run of river, and the Mid-C,
7 Mid-Columbia, projects are downstream from there.

8 There's a four to five hour time delay from
9 Grand Coulee to Wells, which is, you know, our
10 measurement point for Mid-Columbia. So given my simple
11 example here if Bonneville was to optimize on Grand
12 Coulee alone, Puget would receive that water that they
13 charged the system with at 7:00 a.m. Puget would receive
14 that water 11 a.m. or noon. And if Bonneville continued
15 to try to optimize into the heavy load hours, Puget
16 would continue to receive that water on the Mid-C well
17 into the early morning hours, maybe four or five hours
18 past the end of the on peak period. So I think the
19 simple answer to your question is yes.

20 Q. So Bonneville tries to maximize the value of
21 power for the whole system by shaping into the on peak
22 hours?

23 A. I believe power is either the fourth or the
24 fifth operational imperative of the federal Columbia
25 River power system, but with all those other constraints

0887

1 including fish, flood control, navigation, recreation,
2 when you get to the power component of the purpose for
3 the system, that's true.

4 Q. Could you refer to Exhibit 274.

5 MS. DODGE: PSE objects to this exhibit. It
6 appears to be two different BPA documents from two
7 different proceedings that were never made two exhibits
8 by ICNU in this proceeding.

9 JUDGE CLARK: Mr. Van Cleve.

10 MR. VAN CLEVE: Your Honor, we did provide
11 the first portion of this document previously, which is
12 the load resource study and an excerpt from that study,
13 it's quite long. As far as the estimates that
14 Bonneville makes of the heavy load hour production hydro
15 system, it's referred to at page 15, line 6, and we
16 neglected when we first produced this exhibit to include
17 the portion of that study that talks about the hydro
18 shaping factors, but it's a companion document that
19 bears the same date as the load resource study, and we
20 did send this out to all the parties last Friday.

21 JUDGE CLARK: Well, I understand that, and
22 the record should reflect that on Friday you sent an
23 electronic copy to Judge Moss and all other parties with
24 the understanding that you would provide the hard copies
25 this morning, but my understanding is that is not

0888

1 Ms. Dodge's objection to this.

2 Have I misunderstood your objection,

3 Ms. Dodge?

4 MS. DODGE: No, this is an objection that
5 this could have been made part of ICNU's case and
6 wasn't. The hydro shaping argument presented in their
7 response testimony was limited to pointing out that the
8 Company's risk modeling was different than the Aurora
9 modeling, and the Company rebutted that in its rebuttal
10 case. Now we are going into apparently BPA shaping
11 issues or some whatever else they're trying to do with
12 this, and it's an entirely different argument, and the
13 Company has not had an opportunity to rebut it.

14 JUDGE CLARK: Mr. Van Cleve.

15 MR. VAN CLEVE: Your Honor, this is evidence
16 which directly rebuts statements made in the witness's
17 testimony about the shaping factors that the Company
18 used being appropriate, and the witness just testified
19 that the operation of BPA's system has a large impact
20 and severely limits the ability of the company to
21 operate its hydro, so I think that this evidence is
22 directly relevant to rebutting what the witness has
23 said.

24 JUDGE CLARK: Well, to the extent you're
25 going to use this in examination of Mr. Mills regarding

0889

1 his rebuttal testimony, I will allow it. However, I am
2 going to narrowly construe that, so you're going to need
3 to refer to portions of his rebuttal testimony that you
4 would like to have this address.

5 MR. VAN CLEVE: Okay, given that, Your Honor,
6 would it be possible to go ahead and take our lunch
7 break now?

8 JUDGE CLARK: All right, we will take a lunch
9 break now, and we will reconvene at 1:15.

10 (Luncheon recess taken at 11:45 a.m.)

11

12 A F T E R N O O N S E S S I O N

13 (1:15 p.m.)

14 JUDGE CLARK: When we recessed for lunch,
15 Mr. Mills was on the stand and Mr. Van Cleve was
16 inquiring, if you would proceed, please.

17 MR. VAN CLEVE: Thank you, Your Honor.

18 BY MR. VAN CLEVE:

19 Q. Mr. Mills, if you could refer to page 23 of
20 your rebuttal testimony at line 13.

21 A. I'm there.

22 Q. And the question here asks whether you agree
23 with the joint parties' adjustment, and your response is
24 that it disregards how the hydroelectric system is
25 managed specifically for non-power constraints; is that

0890

1 right?

2 A. That's true.

3 Q. I would like you to look at Exhibit 279, page
4 13.

5 A. 279?

6 Q. I'm sorry, 274, it's the BPA new resource
7 study.

8 A. Any specific page?

9 Q. Page 3 of the cross exhibit, which is page 13
10 of the load resource study.

11 A. I'm there.

12 Q. Let me ask you first whether you have had
13 occasion to review the load resource study that's part
14 of Bonneville's 2007 power rate case?

15 A. Only in a cursory manner. Puget does not
16 purchase long-term contract power from BPA, our
17 relationship is on a wholesale basis. But given that, I
18 am from my private employment, 18 years at Bonneville,
19 I'm very familiar with these models that Bonneville uses
20 to project generation from the system.

21 Q. Now it says at page 13, line 18, that
22 Bonneville uses the HYDSIM model to project energy from
23 the federal system and that it's based on 50 water years
24 and that it's based on meeting the power and non-power
25 requirements of the system; were you aware of that?

0891

1 A. Yes, but I might also add that with respect
2 to the non-power requirements, the way that this model,
3 both HYDSIM and the hourly scheduling model which is
4 referred to as the HOS model, both of those models will
5 take the 50 years of monthly stream flows for the
6 federal system, which does not include the Mid-Columbia
7 projects, and it's anybody's -- the best assessment
8 anyone can make when they produce the generating
9 capability from the federal system with respect to
10 non-power, and primarily we're talking about fish, the
11 biological opinion constraints, are the most recent
12 known operations in place at the time the model is run.

13 Now anybody with hydro familiarity in this
14 region will tell you that that's as risky as projecting
15 using normal water. Because as we enter any water year
16 which begins October 1, as more is known and the stream
17 flow, snow pack, and precipitation patterns become more
18 known, the biological opinion constraints on the system,
19 on the federal system, can change dramatically. And the
20 example would be that changing reservoir elevations and
21 more importantly minimum stream flow and elevations
22 downstream of projects to maintain coverage of salmon
23 reds or salmon eggs, those operations and those
24 requirements change nearly weekly once we're into the
25 water year. So with respect to modeling average water

0892

1 against a published biological opinion, it does that.
2 What it doesn't do, it's not able to be dynamic enough
3 to be adjusted for the fish operations as they change
4 during the course of the water year.

5 Q. Could you refer to page 21 of Exhibit 274.

6 A. That would be page 12 in BPA page numbering?

7 Q. That's correct.

8 A. I'm there.

9 Q. In determining the shape of the hydro shape
10 in Aurora, did you consider Bonneville's projections for
11 heavy load hour hydro generation ratios that are noted
12 here for the 50 water years?

13 A. No. And again it goes back to the
14 applications of these two models. Let me start with
15 Aurora first. Aurora will dispatch hydro based upon
16 load. What the BPA models are attempting to do is
17 trying to ascribe both a value and/or a contract value
18 cost for the generation coming out of the federal
19 system. So basically these numbers are driving the
20 availability of the federal system for on versus off
21 peak for Bonneville to sign long-term power sales
22 contracts as well as for the Bonneville Power trading
23 floor to optimize their assets in the secondary markets.

24 Q. Well, since your output from the Mid-Columbia
25 projects is so dependent on how Bonneville operates its

0893

1 system, do you consider how Bonneville plans to operate
2 the system when you're determining how much energy is
3 going to be on-peak hours?

4 A. The only -- on a forward looking basis, the
5 inputs that we consider are the reservoir, known
6 reservoir elevations at the time that we conduct a study
7 or run the risk model. But with respect to how
8 Bonneville might choose to shape their system, keep in
9 mind there's a, you know, we're limiting non-power
10 constraint discussions to fish, but there is a number of
11 other adjustments that are made generally exogenous to
12 this study that impact the flow of the system, and these
13 could be things -- and I really don't want to dive into
14 the detail, but I would be glad to, but the after the
15 fact adjustments or the real time adjustments that
16 Bonneville has to make for the return of the Canadian
17 Titlement Treaty and for the relationship between BPA
18 and BP Hydro with respect to the non-treaty storage.

19 Q. Could you take a look at the chart on page 4
20 of your direct testimony, rebuttal testimony.

21 A. Oh, rebuttal?

22 Q. Sorry, 269C.

23 A. I'm there.

24 Q. Now with the chart on page 4, you're
25 attempting to validate the Aurora shaping of on peak

0894

1 hydro energy by comparing it to recent historical
2 results; is that right?

3 A. I think we're trying to provide a comparison
4 between Aurora, the risk system, and what looks like to
5 be a five year actual number here.

6 Q. And how many years in this period were
7 considered poor water years?

8 A. Three, maybe four of the five were below
9 normal.

10 Q. And wouldn't it make more sense to compare
11 the Aurora results to normalized historic results?

12 A. Again, Aurora assumes a 50 year water data
13 set under normal conditions and then attempts to
14 dispatch that hydrogeneration to load. The heavy or the
15 on peak versus off peak allocation in Aurora are not an
16 artifact of it trying to optimize price as much as it is
17 trying to dispatch those resources to meet load. It's a
18 two-step logic, hydro to load, combustion or gas fired
19 or all other thermal generation to price.

20 Q. Okay, I would like to ask you about the
21 errata to your testimony on page 33 and 34, rebuttal
22 testimony, sorry.

23 MS. DODGE: May I approach the witness?

24 JUDGE CLARK: Yes.

25 THE WITNESS: I have that, Mr. Van Cleve.

0895

1 BY MR. VAN CLEVE:

2 Q. Now your errata replaces the 72% on line 17
3 with 58%, and then at the top of the next page on line 2
4 the 28% is replaced with the 42%?

5 A. That's correct.

6 Q. And can you explain why you made that change?

7 A. So we are on page 33 of my rebuttal, correct?

8 Q. Yes.

9 A. Okay. This was intended to sync up the text
10 with the numbers. Specifically the text as it was in my
11 rebuttal testimony, the 72%, let's see, the 72%
12 short-term and exchange transactions and 28% spot and
13 real time transactions were in fact extracted from the
14 last column to the right of this table, which reads and
15 is labeled net purchases and sales, whereas the text
16 itself was dedicated or targeted toward purchases. And
17 purchases are broken out separately in the far left box
18 of this table where you can see the percent of the
19 megawatts distributed between short-term and exchange at
20 58% and spot and real time or indexed transactions at
21 42%.

22 Q. And can you tell us what a short-term market
23 transaction is, what does that mean?

24 A. A short-term market transaction would be any
25 transaction beyond the day ahead or the prescheduled

0896

1 transaction, so that would include the balance of the
2 week, balance of the month, and a forward month or up to
3 an annual strip contract for forward markets.

4 Q. Okay. And then line 2 on page 34 it talks
5 about spot, does that mean day ahead?

6 A. The phrase on line 2 says spot and real time,
7 so if we're going to keep those distinguished or
8 separate, then yes, the definition of spot here would be
9 day ahead.

10 Q. And real time means?

11 A. The day of, next hour.

12 Q. Now have you categorized the Centralia
13 contract as a spot or real time purchase?

14 A. We have some of our contracts that because of
15 the long-term nature of the contract they should be
16 labeled as a short-term contract being that the -- the
17 tenor involved. A lot of times what will happen is some
18 of those contracts, we have one, that one with
19 Centralia, we have a seasonal exchange contract with an
20 investor owned utility in California, they have
21 scheduling provisions in them that allow you on a
22 prescheduled basis to change the volume that you are
23 going to take under the contract. And again, we do this
24 for reliability and for price reasons. And what may in
25 fact happen at times is then when the trader or the

0897

1 scheduler goes into the scheduling system to make that
2 change, it may in fact overwrite the date of the
3 transaction, which would basically convert what should
4 have been a short-term transaction or a forward
5 transaction. Just by making that day of change, it
6 might end up showing on the data sheet as a spot or
7 short-term.

8 Q. Was every kilowatt hour of energy under the
9 Centralia contract characterized as a spot transaction?

10 A. Without having the scheduling system output
11 in front of me, I'm not able to answer that question.

12 Q. What's the term of the Centralia contract, do
13 you know?

14 A. This is the -- I believe that contract
15 expires in December, I would have to check on that as
16 well, Mr. Van Cleve.

17 Q. Okay, if we could return to the issue of the
18 minimum on and off times of the gas plants, and if you
19 could refer to Exhibit 590C, which was an exhibit to the
20 joint parties' testimony.

21 A. I'm there.

22 Q. Does this show the minimum on and off times
23 for a number of the new gas fired resources included in
24 the Aurora data set?

25 A. Yes, but this is, as discussed earlier, this

0898

1 is merely a subset of, and it looks like it represents
2 23 million kilowatts.

3 Q. If you could refer to page 20, line 19, of
4 your rebuttal testimony.

5 A. Which line, I'm sorry?

6 Q. Page 20, line 19.

7 A. I'm there.

8 Q. This confidential number indicates the
9 minimum start time for the Frederickson I plant; is that
10 right?

11 A. No, that's incorrect, this confidential
12 number reflects what would be the minimum down time.

13 Q. So when we're talking about minimum up time,
14 that's the minimum number of hours that the plant can be
15 dispatched; is that right?

16 A. Could you say your question again.

17 Q. Is the minimum up time like that reflected on
18 Exhibit 590C, that's the minimum number of hours that
19 the plant must be operated at when it's turned on?

20 A. Well, given that we're discussing in broader
21 context here a large set of generating assets throughout
22 the WECC, there's a qualified yes to that question. And
23 the qualification would have to be, when operating in a
24 geographic or a range dealt with through an integrated
25 or an independent system operator, in this case the

0899

1 California ISO, the contractual provisions can often be
2 overridden for must fund reliability needs. But without
3 that proviso, I guess the answer is yes, that would --
4 16 hours would be the minimum run time per the contract
5 excluding any reliability or must run provisions.

6 Q. So referring back to page 20, line 19, that
7 confidential number there, is that what the minimum run
8 time for Frederickson I is?

9 A. No, that's the minimum down time.

10 Q. Is it also the same as the minimum up time?

11 A. No, it is not, and that would be an equally
12 confidential number.

13 MR. VAN CLEVE: Your Honor, I think we would
14 like to make a records requisition request for the
15 minimum up and down times for the PSE owned gas
16 resources that have been put into the Aurora model. If
17 the Company can't provide that, then maybe we should go
18 into confidential session and ask about it.

19 MS. DODGE: Your Honor, the Company objects.
20 Again, the EPIS database has been put into issue in this
21 case as of last February, we have responded to over
22 1,000 data requests, this could easily have been one of
23 them. This appears to be an issue that's being inserted
24 at the last minute in this proceeding, and it denies the
25 Company as well as the Commission an adequate

0900

1 development of facts such that there can be any
2 confidence placed on them in the ultimate order.

3 JUDGE CLARK: Mr. Van Cleve, any response?

4 MR. VAN CLEVE: Well, Your Honor, I think the
5 testimony of Mr. Mills discloses that the Company has
6 put different minimum up and down times for its own
7 resources into the Aurora data set, and of course our
8 testimony proposed that for a number of the resources
9 that the minimum up and down times be changed, and we're
10 merely asking the witness what they put into the Aurora
11 data set that they want to base rates on.

12 JUDGE CLARK: All right, and then the
13 response to the records requisition you would use
14 presumably in briefing?

15 MR. VAN CLEVE: Correct.

16 JUDGE CLARK: All right, I'm going to
17 overrule the objection and require the records
18 requisition to be submitted to all parties.

19 MS. DODGE: We want to make sure that we have
20 what that was.

21 JUDGE CLARK: All right, and perhaps we can
22 have you confer with Mr. Van Cleve off record before you
23 have the benefit of transcript.

24 MR. VAN CLEVE: And Your Honor, can we get an
25 exhibit number for that?

0901

1 JUDGE CLARK: That would be 290, and I'm
2 presuming based on Ms. Dodge's response that would also
3 be either confidential or highly confidential?

4 MS. DODGE: Yes.

5 BY MR. VAN CLEVE:

6 Q. Mr. Mills, do the minimum up times and down
7 times for the Company for the gas plants that the
8 company owns or has the right to, do they reflect how,
9 and I'm talking about the minimum up and down times that
10 you put into the Aurora model, do they reflect how those
11 resources can be operated?

12 A. Yes, they do.

13 Q. Are you aware that the modifications proposed
14 by the joint parties for the minimum on and off times
15 for the gas plants and the number of starts per day for
16 the gas plants were based on a review of the contracts
17 between the resource operators and the purchasing
18 utilities?

19 A. I am only familiar with the joint parties'
20 investigation to the min on and off time. I'm not aware
21 of an investigation with respect to the start charge
22 parameter.

23 Q. Now you stated earlier in your testimony that
24 these plants, that their operating characteristics were
25 as different as the number of cars in a parking lot; do

0902

1 you recall that?

2 A. Yes, I do.

3 Q. And I'm wondering why many of the up and down
4 times that are specified in this Exhibit 590C are the
5 same?

6 A. Again, I will go back to an answer to a
7 previous question in that the Company relies on EPIS to
8 maintain this database, it's beyond our skill, ability,
9 purview, whatever you might have, to go through and try
10 to update I believe it's 94 or 96 data fields for the
11 combustion turbine logic on contracts that we rightfully
12 and probably legally don't have the ability to get in
13 and look at. And it's not just the contract, the
14 ownership contract or the purchase power agreement
15 contract, it also would be the title 5 Emission permits
16 that are generally not even issued until after these
17 plants are constructed and run through a test period.

18 Those -- we did try to investigate the
19 contractual nature of a number of these plants that are
20 on your list, and we were able to verify some of the
21 data elements, but in no place could we find anything
22 having to do with the Title 5 limitations on emissions.
23 Keep in mind there's 30 local air pollution control
24 districts in the state of California, and off the top of
25 my head I would have to say that more than 1 of those

0903

1 air pollution control districts is represented in this
2 sampling of generators.

3 Q. For those contracts that you did review, were
4 the minimum up and down times in the contracts
5 consistent with what's in Exhibit 590?

6 A. Well, technically I guess we would have to go
7 through a case-by-case basis, but I will tell you that
8 we were able to go through the contracts that were
9 submitted for review and verify that the minimum run
10 time was different in a number of these applications, as
11 was the minimum down time. But in through that review
12 one thing we also found out, keep in mind we -- again,
13 these run times that are shown in 590 were pursuant to
14 the EPIS database. The EPIS database also has a control
15 field for O&M cost, which was set at \$2 a megawatt hour,
16 and for most of these contracts that were submitted we
17 found variable O&M costs of \$5 to \$7. And so it's not
18 reasonable to go through and just change an on and off
19 parameter in the database without then going through the
20 exhaustive study of looking at all the O&M costs in
21 these contracts, all the emissions provisions, and all
22 the start charge escalators.

23 Q. And was one of the contracts that you
24 reviewed the Mountain View contract?

25 A. Yes.

0904

1 Q. And that's attached to what's marked as
2 Exhibit 277.

3 MS. DODGE: Your Honor, the Company objects
4 to reference to Exhibit 277. This is an ICNU response
5 to PSE's data request. The designated witness is
6 Mr. Schoenbeck.

7 JUDGE CLARK: Response, Mr. Van Cleve.

8 MR. VAN CLEVE: Your Honor, we're willing to
9 strike the first page of the exhibit, but the Mountain
10 View contract that's attached, the witness has stated
11 that he's reviewed it, and he also mentions it in his
12 testimony, so I think it would help the record to have
13 the contract in.

14 JUDGE CLARK: Is there a portion of his
15 testimony to which you can refer me?

16 MR. VAN CLEVE: Page 17 of his rebuttal
17 testimony.

18 JUDGE CLARK: All right.

19 MS. DODGE: Your Honor, may I be heard on the
20 substance of an objection to this as well?

21 JUDGE CLARK: You may.

22 MS. DODGE: In the event this inquiry is
23 allowed and this exhibit is admitted, we would not want
24 to strike the first page, because it shows that
25 Mr. Schoenbeck relied on three contracts when the joint

0905

1 parties submitted their testimony, and the Mountain View
2 contract was one that was cited and provided at that
3 time. There's also a Sunrise contract that is cited
4 that they are not proposing to put into the record. It
5 ought to be put into the record if the Mountain View
6 contract is coming in. And in addition, in any event
7 those would be only two contracts of the I believe it's
8 37, at least 37 different generating resources that are
9 implicated in this proposed minimum on and off time
10 adjustment by the joint parties.

11 JUDGE CLARK: All right, I'm going to
12 overrule the objection, I will allow the inquiry
13 regarding Exhibit 277, and the first page of that
14 document which demonstrates the genesis will not be
15 stricken.

16 BY MR. VAN CLEVE:

17 Q. So if you will refer to page 22 of Exhibit
18 277.

19 A. I'm there.

20 Q. It specifies the start up requirements for
21 that project; is that right?

22 A. That's this -- are you on -- describe on the
23 page where you are.

24 Q. I'm in the chart.

25 A. This describes the notification lead time

0906

1 that needs to be provided to the plant operator given
2 various conditions of the unit, cold through hot start.

3 Q. And if you refer to the start of the section
4 where it says operational limits on the previous page
5 and then the carryover Paragraph A, it says dispatch
6 shall be for a run time of no less than three
7 consecutive hours per unit and a down time of no less
8 than three consecutive hours; is that correct?

9 A. That's correct.

10 Q. And this is a 2004 contract, and the Mountain
11 View project is a fairly new gas fired electric plant;
12 is that correct?

13 A. I'm not sure of the date of the contract. It
14 appears to be relatively new because of the heat rate of
15 the unit seems to be quite efficient.

16 Q. Do you know what the vendor of the Aurora
17 model does to verify that the minimum up and down times
18 used in the database are correct?

19 A. My understanding is the, and I discussed this
20 earlier, my understanding is that they perform back
21 testing of the entire -- of the Aurora output using
22 these assumed input parameters. And basically through
23 that back testing, what they're trying to do is ask the
24 questions are these results, in this case prices, power
25 prices, are they reasonably consistent with what

0907

1 happened historically, that's the idea of the back test
2 using these input parameters. That's my knowledge of
3 how they check these data.

4 Q. Do you know whether EPIS guarantees the
5 accuracy of the Aurora data set?

6 A. No, I do not.

7 Q. Do you know whether utilities in the
8 Northwest normally develop their own proprietary version
9 of the data set to run with Aurora?

10 A. I can only speak for my current and my most
11 recent employer, and the answer is we take the EPIS
12 database as it is off the shelf and make adjustments for
13 company owned, or Bonneville case, agency controlled
14 assets.

15 Q. If you could refer to page 18 of your
16 rebuttal testimony.

17 A. I'm there.

18 Q. Now you talk here about the maintenance costs
19 of the plant increasing under -- you talk about how the
20 maintenance costs of the plant would increase if the
21 joint parties' recommendation was accepted; is that
22 right?

23 A. Which line are you on?

24 Q. I'm on line 18 to 20.

25 A. That's correct.

0908

1 Q. Would you agree that the two most important
2 factors in determining the maintenance costs of a
3 combined cycle plant are the hours of run time and the
4 number of starts?

5 A. I would add two more from my experience, and
6 that would be trips from full load has a huge negative
7 impact and as well the quality and type of fuel that's
8 being run through the unit. Whereas natural gas is the
9 designed fuel of choice for these units, although many
10 of them are run on distillate as a backup fuel.
11 Distillate because of the less refined or the cracked
12 process tends to, for lack of a better technical term,
13 tends to gum up the compressors.

14 Q. And on page 19 at line 30 you propose an
15 adjustment for this maintenance expense, correct?

16 A. Well, I'm not sure we're proposing one. We
17 for again lack of knowledge about the individual O&M
18 costs for these units, we do know from experience that
19 the more you cycle these units, the higher the O&M costs
20 are. Taking a look at the Aurora database, Aurora
21 maintains a \$2 variable O&M charge for these units. We
22 took a look at the ratio of our own historical O&M costs
23 of our own turbines and decided to run a couple of
24 scenarios by taking the Aurora database and adding first
25 \$1 to the O&M costs and running the Aurora model, find

0909

1 out what the results were, and the second scenario add
2 \$2 to the Aurora \$2, making it a \$4 O&M cost, running
3 that and then verifying the results.

4 Q. Did you go back and look at any of the
5 contracts like for example the Mountain View contract
6 and see how the maintenance costs were charged in that
7 contract?

8 A. We looked at -- it was -- only two contracts
9 were submitted in their entirety, it would be the
10 Sunrise and the Mountain View, but we also took a look
11 at I believe there was ten California Department of
12 Water Resources contracts, only excerpts were provided.
13 We struggled to try to find all of those contracts of
14 the current vintage that was provided by the Industrial
15 Customers and it -- I think without diving into each one
16 of those in detail, but since the Sunrise contract
17 listed showed up both as being provided in its entirety
18 and was also referenced in the DWR contracts, I will try
19 to answer your question looking at that contract.

20 In the Sunrise contract it wasn't clear, and
21 it maybe just escapes me at this moment, but it wasn't
22 clear what the O&M component of the cost calculation
23 was, and I will point out that I believe --

24 THE WITNESS: Can I have a minute, Your
25 Honor?

0910

1 JUDGE CLARK: Yes.

2 MS. DODGE: Your Honor, we do have a complete
3 copy of that Sunrise contract if people want to have it
4 while the witness talks about it.

5 JUDGE CLARK: I think if he's able to respond
6 to the inquiry, we will be fine.

7 A. So with respect to the Sunrise contract, the
8 Sunrise contract appears to have a variable O&M charge
9 of \$3 versus the Aurora assumption of \$2. This is a
10 high efficiency unit, heat rate 7.1, which is very low,
11 very efficient. Wouldn't be typically cycled like a
12 peaking unit would, probably run as a base load
13 notwithstanding. The \$3 O&M charge is not all that
14 inconsistent, but in looking through the full version of
15 the contract, what is striking is the escalation in the
16 startup payments for this unit.

17 Within the contract it appears that included
18 in that \$3 O&M cost are the ability of the purchaser to
19 start that unit 100 times per year. Should the
20 purchaser decide to cycle that unit between 101 to 135
21 starts a year, they're levied a fairly nominal start
22 charge of \$300 per start. If they go above 136 starts
23 to 150 starts a year, it starts to get a little more
24 punitive, \$5,000 per start. Starts above 150 per year,
25 which would be typical of a cycling unit, that start

0911

1 charge goes to \$14,000 per start. I can almost assure
2 you that that assumption is not rolled into a \$3 O&M
3 cost for this contract.

4 BY MR. VAN CLEVE:

5 Q. Did you attempt to determine the change in
6 the number of starts and the number of hours of
7 operations that would occur for these plants if the
8 joint parties' recommendation was adopted?

9 A. Could you restate the question.

10 MR. VAN CLEVE: Can you read it back, please.

11 (Record read as requested.)

12 A. Is that a generic question to all of the
13 contracts submitted? The answer would be no. But I did
14 look at the Sunrise contract in particular, and the
15 Aurora data cycling, which it is interesting, Sunrise is
16 listed on Exhibit 590C as the second to the last, and
17 it's shown as a 19 hour minimum up and a 10 hour minimum
18 down. For lack of -- and I basically assumed a 24 hour
19 thermal cycle for this unit. The joint parties'
20 recommendation I believe was 6 and 4, which would be a
21 10 hour duty cycle. Now given that this is a high
22 efficiency unit, it's not inconceivable that what would
23 happen as you moved from a 24 hour thermal cycle, which
24 is 1 cycle on, 1 cycle off, as you move from that 24
25 hour, which is represented roughly in the Aurora data

0912

1 set, to a 10 hour cycle as proposed by the joint
2 customers, those number of starts increase dramatically.
3 And I believe I had the notes here that on a 24 hour
4 thermal cycle shown in Aurora would give you a max of
5 365 cycles a year, assuming every day as operated. With
6 the 6 hour, 4 hour off proposal, which is the 10 hour
7 cycle, that would allow 876 thermal cycles per year.
8 Again, the math there is just the 8,760 hours divided by
9 10. Given that example, that change in the thermal
10 cycling, assuming the unit was just ramping on and off
11 all the time, there would be an additional 511 hour
12 start, and as I indicated, all those starts above 150
13 starts are charged out at \$14,000 per start. And the
14 simple math of the additional start times that that
15 escalating start factor would bring another roughly \$7
16 Million to the operating costs of this plant.

17 BY MR. VAN CLEVE:

18 Q. Are you saying that you reran Aurora with the
19 joint parties' minimum up and down times?

20 A. No, I'm not.

21 Q. And that that increased the Sunrise starts
22 and stop?

23 A. No, I did a back of the envelope calculation
24 on this.

25 Q. Is it possible that they would go down?

0913

1 A. My intuition is telling me no, but again I
2 don't have the model, we didn't run the model for this
3 contract in particular. Again, I would have to stress
4 that we rely, as does Bonneville, on EPIS maintaining,
5 it's a third party provider maintaining an objective, an
6 accurate database to be used for our non-company owned
7 and controlled assets.

8 Q. Is it fair to say that if the number of
9 starts is below the limit provided in the contract that
10 the plants won't incur incremental O&M on that basis?

11 A. Could you restate the question, I'm sorry.

12 Q. Yes. Is it fair to say that if the number of
13 starts are below the limit provided in the contract that
14 you will not incur incremental O&M by changing the
15 operating parameters?

16 A. It's difficult to answer, and the reason is I
17 think we can add one more factor onto these what drives
18 turbine O&M maintenance requirements, and that is that
19 it's harder to bring them back from cold, it's harder on
20 them for a cold start. So again, it's, you know,
21 there's a number of up and down factors to look at here,
22 and without looking at the individual unit and what
23 long-term service agreement might exist on that unit and
24 the owner and the provider of the service, it's very
25 difficult to tell.

0914

1 MR. VAN CLEVE: Thank you, Your Honor, that's
2 all the questions I have.

3 I just want to confirm which exhibits have
4 been admitted. I have 274, 276, 277.

5 MS. DODGE: Just a moment, please.

6 I don't believe 274 was offered.

7 JUDGE CLARK: According to my notes 274 was
8 not offered, 276 is stipulated in, 277 was not offered,
9 279C was not received, 281 was withdrawn, 282, 284, 286,
10 288 were stipulated in, 289C was not received, and the
11 revised Exhibit submitted by PSE was received, revised
12 289C was received. Does that help?

13 MR. VAN CLEVE: Well, Your Honor, we would
14 offer 274.

15 MS. DODGE: While the Company objects to 274,
16 we did permit him to ask questions about the witness's
17 consideration of BPA materials, and they have that per
18 the answers that were provided.

19 MR. VAN CLEVE: Your Honor, this is clearly
20 relevant information. How Bonneville intends to operate
21 its' system will affect the Company, it's reliable, it
22 comes from an agency of the federal government, and I
23 don't think it's ever been a rule in administrative
24 proceedings like this that you can't offer a relevant
25 document in cross simply because you arguably could have

0915

1 offered it with your rebuttal testimony.

2 JUDGE CLARK: All right, I'm going to allow,
3 admit Exhibit 274.

4 MR. VAN CLEVE: That's all we have, Your
5 Honor.

6 JUDGE CLARK: All right, thank you, we'll see
7 if there's any inquiry from the Bench.

8 Commissioner Jones.

9

10 E X A M I N A T I O N

11 BY COMMISSIONER JONES:

12 Q. Good afternoon, Mr. Mills.

13 A. Good afternoon, Commissioner.

14 Q. Just a question or two on hydro shaping. If
15 I can understand the way you answered questions in your
16 testimony, could you, you said something to the effect
17 that power production for Bonneville and the way it runs
18 the federal Columbia River system power production is
19 perhaps a number 4 criterion; is that correct?

20 A. That's correct, power generation is fourth or
21 fifth depending on the current policy initiatives. It
22 ranks down below fish and wildlife, navigation,
23 recreation.

24 Q. On I think you mentioned the U.S./Canada
25 water storage treaty, do you consider that to be a major

0916

1 factor in the operation of the Columbia River system as
2 well, and is that included under the rubric of flood
3 control operations in your testimony, or is that a
4 different criterion that you would add?

5 A. That would not be covered under flood
6 control. The Canadian storage as well as the non-treaty
7 storage agreement that exists, I would say the simple
8 answer is adds yet another level of complexity onto
9 managing the federal system and trying to look at how
10 that system is operated and draw any hard conclusions.

11 Q. The next subject is using average forward
12 prices instead of Aurora derived prices. Is it fair to
13 characterize your rebuttal testimony as saying that
14 three-month average forward prices is an alternative
15 worthy of consideration as a substitute for the Aurora
16 derived model but that enough study and enough
17 consideration hasn't been done on it?

18 A. That's correct, there's not been a rigorous
19 statistical analysis of how representative a 90-day
20 average of forward power prices are to basically
21 override the Aurora power price output. Right now we
22 are using a 90-day natural gas price stream to feed
23 Aurora, and then Aurora dispatches all the units and
24 generates that power price. So, one, no statistical
25 work has been done as was done in the 2004 general rate

0917

1 case on gas prices.

2 The second is the current version of Aurora,
3 and maybe they're going to come out with a revised
4 version here some day soon, but the current version that
5 we all know and love, it would be very cumbersome to
6 overlay the forward power prices into it. You basically
7 have to run a single stream flow scenario. Instead of
8 letting the model run a continuous 50 year study it
9 creates in simulation, you would have to either override
10 each scenario, or there was a proposal of some sort of
11 like an ex-post or after the fact processor. Neither of
12 those are I think palatable.

13 But the primary concern that I would have is
14 we just don't know how representative the 90-day moving
15 average of power prices would be here and how
16 replaceable that might -- how replaceable to the Aurora
17 produced prices it might be.

18 Q. And then your other assertion is that the
19 Commission has never used such a methodology, since at
20 least 2001 has always relied upon Aurora?

21 A. As have many other commissions and the
22 Bonneville Power Administration.

23 Q. Is there any utility in the Pacific Northwest
24 that uses a fundamentals based model other than Aurora
25 that you're aware of?

0918

1 A. Not that I'm aware of, Commissioner.

2 COMMISSIONER JONES: That's all I have, thank
3 you.

4 JUDGE CLARK: Commissioner Oshie.

5 Chairman Sidran.

6 All right, any redirect?

7 MS. DODGE: Just briefly, Your Honor.

8

9 R E D I R E C T E X A M I N A T I O N

10 BY MS. DODGE:

11 Q. Mr. Mills, you were asked questions about
12 page 16 of your rebuttal, starting at line 14 about the
13 EPIS June 2006 update, if you would like to refer to
14 that.

15 A. Yes, I have that.

16 Q. And I believe you stated that the Company
17 used the June 2006 update in its rebuttal case; is that
18 correct?

19 A. That's what I stated, and I was in error. We
20 actually -- we kept the I believe it would have been the
21 March or April version of that spreadsheet of that input
22 data set, we held that constant. And the reason was to
23 change at this point to the June 2006, to change at that
24 point in the proceedings we were mixing apples and
25 oranges with all the other parties that are looking at

0919

1 that database. So what we did is using that previous
2 version of that, which I believe was the April or May
3 version, that date may be incorrect, but we held the
4 initial data set constant and then made these additional
5 plant modifications to that. And the reason again is to
6 allow all the parties the granularity without having to
7 go through and change all the data sets again because
8 Puget was making changes to the Puget owned assets that
9 would require everybody to start that process all over
10 again. So from a continuous perspective, we opted to
11 make those changes to the original data set that we
12 filed under.

13 Q. You were also asked about your definition of
14 the spot market, and I believe you stated that it was
15 day ahead. Does that day ahead mean more than just
16 literally the next day under WECC scheduling
17 conventions?

18 A. Well, it's not so much my definition of the
19 spot market as it is the Federal Energy Regulatory
20 Commission. In the June 19, 2001, order in the refund
21 case, FERC defined for both refund and price cap
22 rationale the spot market to include the day of or real
23 time market as well as the transactions that would occur
24 the next day. And under the WECC prescheduled calendar,
25 the market doesn't trade, we don't trade seven days a

0920

1 week, so there's a couple of days, like on Thursdays and
2 Fridays most notably, we have to trade for two days. So
3 on Friday we trade in the schedule for the
4 Monday-Tuesday package, on Thursday we trade in the
5 schedule for the Saturday-Sunday package. And that
6 becomes even more complicated when you lay in a Monday
7 holiday, so now your preschedule definition, which is
8 still under the guise or the definition of spot, could
9 be transactions that are executed but the delivery
10 wouldn't occur maybe for three or four days out.

11 Q. And then finally Mr. Van Cleve asked some
12 questions about whether the Company would be willing to
13 update gas costs in November, would such an update be
14 sufficient in terms of trying to get a better projection
15 of power costs for 2007?

16 A. I think as I said in my testimony, we're not
17 intending nor do we choose to make use of stale market
18 information. I think it's imperative that we would look
19 to update or at least check where the prices are before
20 the rates for this proceeding go into effect. I guess
21 as a trader, my preference, my recommendation would be
22 that we do that as close to the start of these rates
23 going into effect, by that I mean January 1, so that
24 would have a middle, third week of December.

25 And the reason for that is we're in what we

0921

1 call the hydro honeymoon period right now. This water
2 year that will begin October 1 is an unknown, so it's a
3 honeymoon. We start to get a lot more granularity in
4 late November, early December with respect to snow pack
5 and precip. The market reacts to that. The forecast
6 center should start producing their initial runs maybe
7 the first, second week of December, and the market sits
8 up and takes notice.

9 So what we see here because the power book is
10 not just about gas prices, it's also about power prices,
11 and whenever you've got those hoodlums on the same
12 street, you've got a heat rate problem, because the
13 market will move independently, gas versus power, and as
14 it does, that heat rate calculation changes, which
15 brings more or less thermal generation into the
16 equation. So I think from a trader's perspective, I
17 would prefer -- I would recommend that that update occur
18 later towards maybe the middle part of December just for
19 that to bring in that regional hydro flavor.

20 Q. Would such updating need to include other
21 items other than simply putting in a more current
22 three-month gas price?

23 A. Yes. As I said earlier, it's not a linear
24 relationship between a reduction in gas prices and a
25 reduction in power costs, and we went through a little

0922

1 mark to market overview, that would be generally an
2 offset to any savings that you would get from a lower
3 price. And also keep in mind Puget's portfolio is very
4 dynamic, it's made up of a myriad of different
5 contracts, and we tend -- we try to freeze those when we
6 run our power costs for these proceedings, but as time
7 marches on, more information is provided, contracts are
8 renewed with different provisions, and the two that
9 would come to mind in this example, Puget Sound Energy
10 and Bonneville Power have an agreement for the WNP III
11 settlement, that contract has been revised, those
12 numbers will go into effect here shortly, long story
13 short, we'll get less energy and it's going to cost a
14 little more.

15 The other component that we would probably
16 look to bring in is that if you recall in my direct
17 filed testimony we had made a request to the Bonneville
18 transmission, Bonneville Power transmission business
19 line for an additional 650 megawatts of cross Cascades
20 transmission to manage both our winter peak and to
21 manage the integration of new resources into our
22 portfolio. When we filed the rebuttal, Bonneville, for
23 lack of a better technical term, waffled on 110
24 megawatts, so I think we filed for 540. Well,
25 subsequent to rebuttal, Bonneville has now provided us a

0923

1 contract for the full 650 megawatts, so that would be
2 the other component that we would seek to bring in.

3 MS. DODGE: That's all.

4 JUDGE CLARK: Is there any objection to this
5 witness being excused?

6 Thank you for your testimony, Mr. Mills.

7 Ms. Dodge, would you call your final witness,
8 please.

9 MS. DODGE: PSE calls Mr. Salman Aladin.

10 (Witness Salman Aladin was sworn.)

11 JUDGE CLARK: Ms. Dodge.

12 MS. DODGE: May I just ask briefly if
13 Mr. Aladin's prefiled testimony and exhibits will be
14 stipulated.

15 MR. CEDARBAUM: Yes.

16

17 Whereupon,

18 SALMAN ALADIN,
19 having been first duly sworn, were called as witnesses
20 herein and was examined and testified as follows:

21

22 D I R E C T E X A M I N A T I O N

23 BY MS. DODGE:

24 Q. Mr. Aladin, would you please state your name
25 and title, and spell your name for the court reporter.

0924

1 A. My title is Director of Structuring Asset
2 Optimization and Analytics, my name is Salman Aladin,
3 last name is A-L-A-D-I-N.

4 Q. Mr. Aladin, your exhibits numbered 11 through
5 14 will be stipulated to, however, we had passed out
6 three pages of corrections to your testimony; is that
7 correct?

8 A. That's correct. The first one is 11C, page
9 15, there's a chart there, a graph with the power cost
10 under and over recoveries. The theme of it stays the
11 same, but if you see those diamonds on top, they're
12 actually the mirror image, so basically it's the
13 diamonds are a mirror image, but the theme is the same.
14 This was a check done on the simulation model, and it
15 was kind of difficult to submit, but it's pretty much
16 the same, so it's a little change in the graph.

17 MS. DODGE: With that, PSE offers Exhibits 11
18 through 14 into evidence.

19 JUDGE CLARK: 11C and 12 through 14 are
20 received.

21 MS. DODGE: And Mr. Aladin is available for
22 cross-examination.

23 JUDGE CLARK: All right, let's see,
24 Mr. Cedarbaum.

25 MR. CEDARBAUM: We have no questions, Your

0925

1 Honor.

2 JUDGE CLARK: Mr. ffitch.

3 MR. FFITCH: Your Honor, we don't have any
4 questions for Mr. Aladin. In the event we do have, we
5 have identified a cross exhibit which has actually been
6 premarked as Exhibit 15. It is a duplication of an
7 exhibit that's in Mr. Aladin's testimony, and it's
8 simply a color, a larger color version of the same chart
9 that we took from his workpapers. So we don't feel
10 strongly whether it comes in or not, it's a little bit
11 easier to read. If the Company doesn't have any
12 objection, we can still offer it, or we can simply rely
13 on the chart that's in the testimony.

14 JUDGE CLARK: And do you have a page
15 reference for Ms. Dodge for the chart that's already in
16 the testimony?

17 MR. FFITCH: Yes, it's on I believe page 6 of
18 the rebuttal testimony.

19 MS. DODGE: The Company does not object.

20 JUDGE CLARK: All right, 15 is received.

21 MR. FFITCH: Thank you, Your Honor.

22 JUDGE CLARK: Mr. Van Cleve.

23 MR. VAN CLEVE: Your Honor, we do not have
24 any cross for this witness.

25 JUDGE CLARK: All right.

0926

1 Mr. Furuta, FEA.

2 MR. FURUTA: Thank you, Your Honor.

3

4 C R O S S - E X A M I N A T I O N

5 BY MR. FURUTA:

6 Q. Good afternoon, Mr. Aladin.

7 A. Good afternoon.

8 Q. I would like to turn first to your Exhibit 14
9 rebuttal, and on the first page, page 1 towards the very
10 bottom, I believe you indicate that the various consumer
11 parties in this proceeding gloss over the fact that the
12 \$40 Million cap of the PCA expires. If the Commission
13 were to reinstate the \$40 Million cap, would the Company
14 withdraw its proposed revisions to the PCA mechanism?

15 A. Actually, I'm not sure if I'm in a position
16 to answer that question, but I think when we looked at
17 when the new era came to renew the PCA, we went through
18 a great deal of work and analysis to come up with a
19 structure that really benefited both the customers and
20 shareholders, and we strongly believe that a structure
21 that we proposed is really the appropriate one for us.
22 So that never came into question, whether we would --
23 whether keeping the cap would be an issue, and so I
24 don't think I'm in a position to answer that question.

25 Q. Okay. And am I correct that the \$40 Million

0927

1 cap never had to function during the first four year
2 period that it was -- that the PCA was in effect?

3 A. Can you repeat that question.

4 Q. The \$40 Million cap, were you here during the
5 cross-examination of Mr. Lazar this morning?

6 A. Yes, I was.

7 Q. Okay, I believe he had testified that it was
8 his belief that the \$40 Million cap never had to
9 function.

10 A. You mean the power cost imbalance never hit
11 the \$40 Million cap?

12 Q. That's correct.

13 A. I disagree with that. We have hit the cap in
14 the last four PCA periods quite a few times. We ended
15 up with a PCA for less than the cap, but I believe we
16 hit the cap 2005, January, February, March, April, May,
17 and then again in 2005, October, November, December,
18 January, February, March, and April, sorry, we didn't
19 hit 2005 May, but all the other months we did hit the
20 cap I believe.

21 Q. Would you agree that the price that the
22 Company pays for purchase power is affected by natural
23 gas prices?

24 A. I think it's impacted by not only natural gas
25 prices but other fundamentals in the market and market

0928

1 behavior. And so it's perhaps a component, but like
2 Mr. Mills was saying, it's the way the market behaves is
3 very complex, so when he was talking about -- Mr. Mills
4 was talking about the heat rates, well, you know, if the
5 correlation between and the behavior between gas and
6 power breaks down, which it does quite a few times, you
7 know, the heat rates blow out. So it depends, sometimes
8 there's a tight relationship, sometimes there is none,
9 and that's the nature of the market, so it just depends.

10 Q. And would you agree that the natural gas
11 prices have been fairly volatile over the past four
12 years?

13 A. You would have -- could you define volatile,
14 I mean can you give me a definition of volatile, because
15 I mean --

16 Q. How about if you give a definition in your
17 opinion what the term volatile means.

18 A. Sure. First I will just give a more of a
19 little bit more technical definition. Typically in the
20 markets you define volatility as the difference of two
21 of the prices, and you take a series of prices and take
22 the standard deviation. Then you take the -- and then
23 you annualize it. So when you hear the -- when you hear
24 volatility in the market, if you talk about -- if the
25 market talks about volatility, it talks about a

0929

1 percentage, and it's typically annualized, and it
2 typically talks about a 1 standard deviation move. So
3 when we use the term volatility, a lot of times we keep
4 that same definition.

5 And yes, the market has been, there has been
6 a considerable amount of volatility, but the volatility
7 itself has been volatile. So yes, that's a true
8 statement in my definition as well.

9 Q. Okay. Now turning to page 2 of your rebuttal
10 at around lines 11 through 14, you indicate that the
11 Company's proposed revisions to the PCA mechanism would
12 provide a fair and balanced sharing of power cost risk
13 and rewards between the Company's customers and its
14 shareholders; is that correct?

15 A. That's correct.

16 Q. Okay. And on the next page, page 3, in
17 response to the first full question on that page, you
18 seem to disagree that the Company's proposed changes to
19 the PCA mechanism would result in a large shifting of
20 risk to Puget Sound's customers; is that correct?

21 A. That's correct.

22 Q. However, isn't it correct that based on the
23 actual conditions facing the Company over the past four
24 years that if the Company's proposed changes in the PCA
25 mechanism had been in place that rate payer costs would

0930

1 have been greater than they actually were?

2 A. If I may elaborate on that.

3 Q. If you could give a yes or no answer first.

4 A. I think it needs a little bit of elaboration,
5 if possible, because that's for -- that's one thing --

6 Q. Excuse me, Mr. Aladin, I think the record
7 would be clearer if you are answering yes or no to give
8 your answer, and then you may elaborate.

9 A. Sure. Yes, and that's 4 data points in a
10 whole huge range of distribution of possible outcomes,
11 and that's -- it's a very narrow way of looking at
12 things and what -- but that's why we've gone through a
13 lot of analysis and work to show a whole range of
14 possible outcomes, and that was the purpose, one of the
15 many purposes of analysis, and it gives a better picture
16 of what costs and what benefits customers and
17 shareholders will have. And by focusing on 4 data
18 points, 4 years, is a misrepresentation of a range of
19 possible outcomes.

20 Now what the -- our proposal does do with the
21 initial 50/50 sharing is that if our proposal -- the
22 first three years of the PCA period, PCA 1, 2, and 3, we
23 have had a lower than normal hydro, so we were sharing
24 the costs of the uncontrollable risks from the very
25 beginning, and that's why the imbalance was more for the

0931

1 customers than the shareholders. Now the last PCA 4
2 period you will see that we would have actually shared
3 the overrecovery with the customers 50/50, and that was
4 one of the essences of having a 50/50 sharing mechanism
5 from the very beginning.

6 Q. Now, in fact, on pages 4 and 5 of your
7 rebuttal, I believe you provide, you can take a look,
8 might characterize it as four additional different data
9 points as an example, and I believe you had set forth an
10 example where power costs were in excess of \$120 Million
11 each of those four years; is that correct?

12 A. Are you referring to table 1 on page 4?

13 Q. Yes.

14 A. It's taking the assumption of having \$120
15 Million each year.

16 Q. Okay.

17 A. For four years.

18 Q. And I believe your conclusion here is that
19 customers would be better off under Puget Sound's
20 proposed mechanism than under the current mechanism with
21 or without the \$40 Million cap; is that correct?

22 A. No, this was shown to show how the different
23 mechanisms would work for plus or minus \$120 Million for
24 four years. What this is showing is that existing
25 mechanism with a \$40 Million cap the customers would

0932

1 have \$438 Million, with the proposed mechanism it would
2 be \$392 Million, and with the current mechanism without
3 the cap it would be \$40 Million, without the \$40 Million
4 cap it would be \$328 Million. So the proposed mechanism
5 follows for the customers would fall in between, and I
6 don't know if it's exactly in between, but it's in
7 between the existing mechanism with the \$40 Million cap
8 and the current mechanism without the \$40 Million cap.
9 And this was just to show the different, the three
10 different mechanisms so to speak.

11 Q. Okay.

12 A. And later on I talk more about the analysis
13 we did to give a more accurate picture of these
14 outcomes, and it's directionally the same as what's
15 shown here.

16 Q. But do you know what the actual power cost
17 excesses that have occurred in each of the past four
18 years?

19 A. I have a general idea.

20 Q. Go ahead.

21 A. And I have it, if you turn to page 10 of my
22 rebuttal, this chart basically shows the last four years
23 under and overrecovery of power costs.

24 Q. So if we were to sum the four data, that four
25 amounts shown on your chart, that would give us an idea

0933

1 of what the excess power costs would have been for those
2 four years?

3 A. That's correct.

4 Q. And it's in the order of magnitude of \$40
5 Million roughly?

6 A. Short of \$40 Million I think.

7 Q. All right.

8 A. Because the first three years we were
9 underrecovering, and the fourth year we were
10 overrecovering, so it's about, if I remember, and this
11 is approximations, I believe it's -- one minute, let me
12 just check, I believe it's \$27 Million, approximation.

13 Q. But that's still over an order of magnitude
14 less than the data you use for table 1?

15 A. That's correct, because that's 1 data point.

16 Q. Okay. Now on page 5 of the same exhibit, you
17 admit that utilizing the \$120 Million excess power costs
18 for each of those four years is not likely; do you
19 happen to know the probability of that actually
20 happening?

21 A. Can you repeat that, please, which page are
22 you referring to here?

23 Q. Page 5 in answer to the question at the top
24 of the page.

25 A. And what is your question?

0934

1 Q. My question was, do you happen to know what
2 the probability is of power costs exceeding \$120 Million
3 for four straight years?

4 A. I don't know the probability off hand, but
5 there is a small probability I'm sure.

6 Q. Okay. Turning to page 14 of your rebuttal, I
7 may have the wrong cite, it may be page 13, yes, page
8 13, I'm sorry, page 13 at the bottom of the page, I
9 believe you dispute both the joint parties and our
10 position that the Company is in a better position than
11 customers to manage power cost risks, and I believe you
12 state that power costs are, to a significant extent, are
13 outside the control of Puget Sound Energy as well as its
14 customers; is that correct?

15 A. Can you repeat that question, please.

16 Q. I believe you dispute our position that the
17 Company is in a better position than its customers to
18 manage power cost risks; is that correct?

19 A. No, that's not correct, I was referring here
20 to the uncontrollable risks and in this case
21 specifically to hydro. We can respond to hydro
22 variability, but by that time we have no control on the
23 costs that we incur to hedge the variability. It's an
24 uncontrollable risk we face as well as the customers.

25 Q. And yet isn't it your understanding that the

0935

1 Company is asking to include in its revenue requirement
2 in this proceeding costs associated with additional
3 hedging?

4 A. Can you be a little bit more specific, and
5 which testimonies are you referring to?

6 Q. Well, for example, I believe Mr. Mills
7 testifies in his direct, are you familiar with
8 Mr. Mills' direct testimony, Exhibit 251C?

9 A. I have a general understanding of it but not
10 a detailed one.

11 Q. Okay. Is it within your general
12 understanding that the Company in his testimony is
13 requesting costs associated with additional hedging?

14 A. Yes.

15 Q. Okay. And would you also agree that hedging
16 is a significant tool that the Company has to help
17 protect customers from future price risk?

18 A. Hedging is crucial for managing the
19 variability of our power cost portfolio for controllable
20 risk. For uncontrollable risk as hydro, there we have
21 not found a hedge there that is economical or we haven't
22 found too many counterparties that are even willing to
23 hedge our hydro risk. So the funds for the costs
24 pertaining to hedging, they won't help us for hydro
25 risk.

0936

1 MR. FURUTA: Okay, thank you, Mr. Aladin, I
2 have no further questions.

3 JUDGE CLARK: All right, let's see if there's
4 any inquiry from Bench.

5 Commissioner Jones.

6 Commissioner Oshie.

7 Chairman Sidran.

8 Any redirect?

9 MS. DODGE: No, Your Honor.

10 JUDGE CLARK: Thank you. Any objection to
11 this witness being excused?

12 None. Thank you for your testimony,
13 Mr. Aladin.

14 And that concludes the presentation of the
15 testimony in this proceeding. There are some
16 housekeeping matters that we should probably address
17 regarding the outstanding exhibits, but are there any
18 matters that we need to address with the Commissioners
19 present?

20 Mr. Cedarbaum.

21 MR. CEDARBAUM: Thank you, Your Honor, I'm
22 not sure about the answer to that question. I have
23 assumed that we were going to discuss Bench request
24 responses and the admission of responses that have been
25 submitted so far by the Company. We do have an

0937

1 objection to a portion of Bench request response, Bench
2 Request 5, which is Exhibit 9.

3 JUDGE CLARK: Right, and is that a discussion
4 that you think would be best held in the presence of the
5 Commissioners, or is it a housekeeping matter after they
6 have departed?

7 MR. CEDARBAUM: I don't know, it's an
8 objection to a portion of the response. That seems to
9 me to be more than just a housekeeping matter, but I
10 just wanted to alert the Commissioners that I was going
11 to raise that objection, and I don't know whether they
12 need to be here for that or not.

13 JUDGE CLARK: All right, if you will give me
14 a moment.

15 COMMISSIONER JONES: Which Bench request is
16 this, Judge?

17 MR. CEDARBAUM: It's been premarked as
18 Exhibit 9, and it's the Company's response to Bench
19 Request Number 5.

20 COMMISSIONER JONES: Please provide the
21 direct costs associated with the \$300 Million, that one?

22 MR. CEDARBAUM: (Nodding head.)

23 COMMISSIONER JONES: Okay.

24 (Discussion on the Bench.)

25 MR. CEDARBAUM: Your Honor, perhaps then if

0938

1 the Commissioners haven't seen it or don't have copies,
2 we could do this as an item without them present.

3 JUDGE CLARK: Right, I would suggest that we
4 at least attempt it down that road to see if we can
5 resolve these matters without the Commissioners being
6 present. And if it's necessary for me or Judge Moss to
7 confer with them, we could do that if that issue arose.

8 All right, well, I was going to go through
9 the exhibit list, the Bench requests being the most
10 important thing on my list to see about the admission
11 of. We do have two of them. My understanding is that
12 we don't have a response yet to Bench Request Number 1;
13 is that correct?

14 MR. CEDARBAUM: You do from the Company,
15 Staff is preparing one.

16 JUDGE CLARK: Right, that was my
17 understanding, it was Staff's response. And do you
18 anticipate a date that that will be filed?

19 MR. CEDARBAUM: I would hope that we would
20 have that filed with the Commission tomorrow.

21 JUDGE CLARK: All right.

22 MR. CEDARBAUM: And if you, unless you have
23 other instructions, we could just mark it as part of
24 Exhibit Number 5 and just put it behind the Company's
25 response unless you wished to give it a different

0939

1 number.

2 JUDGE CLARK: I think that it would be best
3 to keep the responses together in the same exhibit
4 number in Exhibit 5.

5 And then we also had I believe it was the
6 response to Bench Request 9 that PSE had not yet been
7 able to provide; is that correct?

8 MS. DODGE: That's right.

9 JUDGE CLARK: So it's difficult to ask the
10 parties to pose objections on something that has yet to
11 be filed, but for the responses that have been filed
12 thus far, are there any objections to the responses to
13 the Bench request?

14 MR. CEDARBAUM: Yes, Your Honor.

15 JUDGE CLARK: Mr. Cedarbaum.

16 MR. CEDARBAUM: Thank you. As I indicated,
17 Staff does have an objection to a portion of the
18 response to Bench Request Number 5 which is contained in
19 Exhibit Number 9.

20 JUDGE CLARK: Right.

21 MR. CEDARBAUM: Our objection would go to the
22 portion of the response looking at page 1 of the
23 response, there's a line toward the bottom that says
24 total issue costs as a percent of gross amount of
25 transaction 3.12%, we would object to everything that

0940

1 follows that line as being unresponsive. The Bench
2 request simply asked to provide the direct issue costs
3 associated with Puget Energy's November 1, 2005, \$310
4 Million common stock sale. Up until that line the
5 response seemed quite responsive to that request. The
6 rest of the response just contains really a discussion
7 of whether or not that 3% is a reasonable amount or not,
8 it doesn't seem at all responsive to the request itself.
9 So we would move for its -- we would move that it be
10 stricken from this response to the Bench request.

11 JUDGE CLARK: All right, yes, Ms. Dodge.

12 MS. DODGE: Typically in responses to data
13 requests, it's quite common if the request itself
14 elicits an answer that a party believes is atypical or
15 for some reason some attention needs to be paid to
16 whether one could rely simply on the face of the data
17 for a particular purpose that's at issue in the case,
18 the party has the ability to make that a part of the
19 response. And in quite a few of the exhibits that have
20 been admitted where PSE had a data request response,
21 such cautions were noted.

22 And I think a Bench request it's even more so
23 important to call things like that out, because these
24 arise when a witness is unable on the spot to answer a
25 question that the Commission has posed, and this was a

0941

1 part of the hearing with Mr. Gaines I believe where the
2 Commissioners were quite interested in flotation costs
3 and asking about them, and we believe that just on the
4 face of looking at the last flotation cost that one
5 might incorrectly conclude that that's a typical level
6 of flotation costs, and the Company simply provided
7 additional information to help the Commissioners weigh
8 what to do with the answer.

9 JUDGE CLARK: Mr. Cedarbaum.

10 MR. CEDARBAUM: Just a brief response, Your
11 Honor. Again, you know, this is the last day of the
12 hearing, and we have had a number of objections from the
13 Company today when other exhibits were offered that
14 really that -- and the objection was that the offered
15 exhibit was just a chance for additional direct
16 examination, that's what this Bench request response
17 does as to the portion that Staff finds objectionable,
18 it's just putting in additional direct examination on an
19 issue that could have been included in Mr. Gaines'
20 testimony and could have been included in Dr. Morin's
21 testimony. It's not responsive to the question.

22 MS. DODGE: Actually, Dr. Morin did speak to
23 flotation costs, and as I understand it the
24 cross-examination was challenging that testimony, and
25 then a particular question was raised about, well, what

0942

1 about the last stock sale, which is a data point, but
2 it's just one piece of information and not a complete
3 picture of the recent historical experience on flotation
4 costs.

5 JUDGE CLARK: All right, I'm going to take
6 the objection and the motion to strike under advisement
7 so I can consult with Judge Moss who had the advantage
8 of being present at the Bench during the presentation of
9 those Bench requests and the responses.

10 Are there objections to, let's see, Exhibit
11 Number 5, we'll have to take under advisement, Bench
12 Data Request Number 2 which is Exhibit 6, Exhibit 7,
13 Exhibit 8, 10, or 801?

14 MR. FFITCH: Your Honor, Simon ffitch for
15 Public Counsel regarding, oh, well, I'm referring to
16 Bench Request Number 8, I'm not sure if you just listed
17 that one.

18 MS. DODGE: 802?

19 MR. FFITCH: 802.

20 JUDGE CLARK: I didn't get to 802.

21 MR. FFITCH: Sorry.

22 JUDGE CLARK: That's okay.

23 MR. FFITCH: Well, my request is for an
24 additional period of time to review it to determine if
25 we have an objection. I don't have my technical folks

0943

1 available to look at it today or at least in the hearing
2 room, and it was I believe just provided today according
3 to the date on the DR response.

4 JUDGE CLARK: Right.

5 MR. FFITCH: So we do have 48 hours to take a
6 look at it.

7 JUDGE CLARK: That's my understanding, and I
8 didn't address that in my inquiry about objections on
9 the other exhibits, so it seems reasonable to me to give
10 everyone who has been sitting in the hearing today an
11 adequate opportunity to review that, and so I'm going to
12 hold in abeyance any admission regarding 802.

13 With respect to the remaining exhibits, not
14 including Exhibit 9 with the outstanding motion to
15 strike and Exhibit 1 which is, I mean the response to
16 Bench Request Number 1 which is yet incomplete and the
17 response to Bench Request 9 which is as of yet
18 incomplete, is there any objection to their receipt?

19 Hearing none, they are received.

20 All right, are there any other -- have the
21 parties had an adequate opportunity to review the
22 exhibit list that was distributed by Judge Moss to see
23 if there are any other exhibits that I would
24 affectionately refer to as dangling exhibits we haven't
25 specifically addressed yet?

0944

1 Mr. Cedarbaum.

2 MR. CEDARBAUM: I just wanted to say that the
3 Company also distributed by E-mail I think yesterday a
4 corrected version or revised version that was a bit more
5 descriptive, and Staff has reviewed that and has no
6 objection to the Commission using that if it wishes,
7 adding whatever exhibits may have postdated that.

8 JUDGE CLARK: All right.

9 MS. DODGE: But I believe we have a new
10 exhibit list from Judge Moss this morning, the Company
11 would just ask that we be given a couple of days to
12 check the final list once it's distributed.

13 JUDGE CLARK: Well, I'm certain that that's
14 something that we can accommodate electronically in the
15 same format that has been done thus far.

16 Are there any other matters that we need to
17 address? The briefing schedule has already been
18 established, and I note, I'm assuming since I didn't
19 have the advantage of reviewing the updated exhibit list
20 that one of the things that was included in that is
21 additional descriptors for Exhibits 184 and 195, a
22 description for 162.

23 MS. DODGE: Yes.

24 JUDGE CLARK: Is that correct?

25 MS. DODGE: Yes.

0945

1 JUDGE CLARK: All right. Are there any other
2 matters we should address?

3 All right, I need to confer briefly with
4 Judge Moss regarding the outstanding motion to strike,
5 we are at recess until further call.

6 (Recess taken.)

7 JUDGE CLARK: All right, we're back on the
8 record, I had an opportunity to confer with Judge Moss
9 regarding the motion to strike portions of Bench Data
10 Request Number 5, the motion is granted.

11 If there isn't anything further to consider
12 on this record, we're adjourned.

13 (Hearing adjourned at 2:55 p.m.)

14

15

16

17

18

19

20

21

22

23

24

25

E X H I B I T L I S T

BENCH EXHIBITS

1
2
3 1 Public Counsel, Compilation of Public Comments
4 2 Partial Settlement Agreement Re: Electric Rate
5 Spread, Rate Design, and Low Income Energy
6 Assistance
7 3 T(Joint-21T): Joint Testimony of Lazar,
8 Schoenbeck, Steward, Higgins, Hoff, Selecky,
9 and Glaser in Support of the Partial
10 Settlement Agreement Re: Electric Rate Spread,
11 Rate Design and Low Income Energy Assistance
12 4C PSE/Staff Joint, Agreement between PSE and
13 Staff on Various Revenue Requirement Issues
14 5C Bench Request No. 1 to PSE, Return on Equity
15 Comparisons
16 6 Bench Request No. 2 to PSE, Executive
17 Compensation
18 7 Bench Request No. 3 to PSE, Tax Deductibility
19 and Adequacy of Structure of Executive
20 Officers' Compensation
21 8 Bench Request No. 4 to PSE, Five Most Capital
22 intensive Gas Transmission and Distribution
23 Projects for 2004-2005
24 9 Bench Request No. 5 to PSE, Flotation costs
25 for Puget Energy's last equity issuance (with

0947

1 portion struck per ruling on Staff's
2 objection)
3 10 Bench Request No. 6 to PSE, Updated Credit
4 Metric Charts Reflecting PSE and Staff Revenue
5 Requirement Settlement Proposal
6 801 Bench Request No. 7 to PSE, Comparison of
7 Changes to Capital Budget Projections from the
8 2004 and 2006 General Rate Case Filings
9 802 Bench Request No. 8 to PSE, Impact of PSE's
10 decoupling proposal across levels of use
11 within the residential class
12 803 Bench Request No. 9 to NWECC, Comparison of NW
13 Natural and PSE gas efficiency efforts during
14 1995 - 2005
15 804 Bench Request No. 10 to Staff and PSE -
16 Clarify Exhibit No. 4 re Everett Delta
17 Adjustment
18 805 Bench Request No. 11 to PSE - Identify
19 accounting and other mechanisms granted by
20 Commission that reduce regulatory lag or
21 reduce risk of lost revenue between rate cases
22 PUGET SOUND ENERGY
23 SALMAN ALADIN
24 11C SA-1CT: Prefiled Direct Testimony re power
25 costs and gas costs (analysis and modeling of

0948

1 portfolio risk management strategies)
2 12 SA-2: Professional Qualifications
3 13 SA-3: Supplemental Prefiled Direct Testimony
4 14 SA-4T: Rebuttal Testimony re PCA proposal
5 allocation of risks
6 CROSS-EXAMINATION EXHIBITS
7 Public Counsel
8 15 PSE Power Cost (under) over Recovery
9 RONALD J. AMEN
10 21 RJA-1T: Prefiled Direct Testimony re cost of
11 service study (cost allocation, rate spread,
12 rate design and decoupling)
13 22 RJA-2: Witness Qualifications
14 23 RJA-3: Navigant Consulting, Cost of Service
15 Model
16 24 RJA-4: PSE Residential Use per Customer
17 25 RJA-5: Natural Gas Use per Residential
18 Customer
19 26 RJA-6: Annual Heating Degree Day Variance
20 from Normal
21 27 RJA-7: PSE Residential, C&I General, C&I
22 Heating Margin Impact
23 28 RJA-8: Example of Monthly Deferral
24 Calculation
25 29 RJA-9: Gas Tariff Sheets (as-filed)

0949

1 30 RJA-10: Summary of RNA Simulation
2 31 RJA-11T: Rebuttal Testimony re Decoupling and
3 Other Rate Design Issues
4 32 RJA-12: Test Year Typical Residential Monthly
5 Bills w/ customer charge of \$8.25
6 33 RJA-13: Test Year Typical Residential Monthly
7 Bills w/ customer charge of \$17.00
8 34 RJA-14 Proxy Group of Gas & Electric
9 Distribution Companies Ratemaking Solutions to
10 Address Regulatory Lag, Weather, Decoupling
11 and/or Other Cost Recovery Issues
12 35 RJA-15: Weather Normalization Adjustment
13 Clauses Approved in the U.S. August 2006
14 36 RJA-16: Staff Response to PSE DR PC-5
15 37 RJA-a7: Adjustments to Revenue by Rate
16 Schedule Test Year Ended September 30, 2005
17 RONALD J. AMEN (adopting Janet K. Phelps)
18 38 JKP-1T: Prefiled Direct Testimony
19 39 JKP-2: Professional Qualifications
20 40 JKP-3: Adjustments to Volume (Therms) by Rate
21 Schedule - Test year Ended 9/30/2005
22 41 JKP-4: Gas Cost of Service Study Excluding
23 Gas Costs and Revenues as supplemented by
24 PSE's update to the study
25 42 JKP-5: Account Detail by Classification and

0950

1 Rate Class

2 43 JKP-6: Load Characteristics by Rate Class -

3 Test year Ended 9/30/2005

4 44 JKP-7: Revised Allocation of Revenue

5 Deficiency to Rate Classes - Test year Ended

6 9/30/2005

7 45 JKP-8: Comparison of Residential Customer

8 Charges of Gas Distribution Companies

9 46 JKP-9: Calculation of Proposed Schedule 101

10 Rates

11 47 JKP-10: Depreciation Tracker Rates 12 Months

12 Ended December 2007

13 48 JKP-11: Proposed Natural Gas Tariff Sheets

14 (as-filed)

15 CROSS-EXAMINATION EXHIBITS

16 Staff

17 49 PSE Response to WUTC Staff Data Request No.

18 378

19 Public Counsel

20 50 PSE's Response to Public Counsel's Data

21 Request No. 93

22 51C PSE's Response to Public Counsel's Data

23 Request No. 44 (Confidential)

24 52 PSE's Response to Public Counsel's Data

25 Request No. 45

0951

1 53 PSE's Response to Public Counsel's Data
2 Request No. 42
3 54 PSE's Response to Public Counsel's Data
4 Request No. 46
5 55 PSE's Response to Public Counsel's Data
6 Request No. 47
7 56 PSE's Response to WUTC Staff's Data Request
8 No. 132
9 57 PSE's Response to WUTC Staff's Data Request
10 No. 169
11 58C PSE's Response to WUTC Staff's Data Request
12 No. 170 (Confidential)
13 59C PSE's Response to WUTC Staff's Data Request
14 No. 173 (Confidential)
15 60 PSE's Response to Public Counsel's Data
16 Request No. 18
17 61 PSE's Response to Public Counsel's Data
18 Request No. 19
19 62 PSE's Response to Public Counsel's Data
20 Request No. 24
21 63 PSE's First Revised Response to Public
22 Counsel's Data Request No. 12
23 64 PSE's Response to Public Counsel's Data
24 Request No. 27
25 65C PSE's Response to Public Counsel's Data

0952

1 Request No. 68 (Confidential)

2 66 PSE's Response to Public Counsel's Data

3 Request No. 75 as supplemented by PSE

4 Responses to Public Counsel DR 14 and DR 15

5 Seattle Steam

6 67 PSE Response to Staff DR 374

7 Staff

8 68 PSE Response to Staff Data Request No. 410

9 69 PSE Response to Staff Data Request No. 411

10 WILLIAM F. DONAHUE

11 71 WFD-1T: Prefiled Direct Testimony re gas

12 supply portfolio and pipeline capacity

13 acquisition as it relates to cost of service

14 study

15 72 WFD-2: Professional Qualifications

16 73 WFD-3: Map of Western US and Canadian Gas

17 Supply and Pipelines

18 74C WFD-4C: PSE Energy Management Committee

19 Meeting Minutes for 9/15/2005

20 75 WFD-5: Design Day Gas Demand and Capacity

21 76 WFD-6: PSE Gas Portfolio - Illustration of

22 Capacity Utilization 12 Months Ended

23 9/30/2005, including Design Peak Day for

24 Winter 2004-05

25 77 WFD-7: Determination of TF-1 Capacity

0953

1 Requirement
2 78 WFD-8: Excerpt (Chapter XIII) from PSE 2005
3 Least Cost Plan - New Gas Supply-Side Resource
4 Opportunities
5 79 WFD-9: Excerpt (Chapter XIV) from PSE 2005
6 Least Cost Plan--Natural Gas Analysis and
7 Results
8 80 WFD-10: Excerpt (Appendix I) from PSE 2005
9 Least Cost Plan--Gas Planning Standard
10 JEFFREY A. DUBIN
11 81 JAD-1T: Prefiled Direct Testimony re
12 temperature adjustment and weather
13 normalization
14 82 JAD-2: Witness Qualifications
15 83 JAD-3: Regression Analysis
16 84 JAD-4: Regression Convergence achieved after
17 9 iterations
18 85 JAD-5T: Rebuttal Testimony re Weather
19 Normalization and Dubin Fees in Prior PSE GRC
20 86 JAD-6: Master Data Base Contents Index
21 87 JAD-7: PSE Response to Staff DR 016
22 88 JAD-8: PSE Supp Response to Staff DR 016
23 89 JAD-9: Analysis of PSE Residential Appliance
24 Saturation Survey--Engineering Analysis of
25 Balance Point Temperature Differentials

0954

1 90 JAD-10: E-mail from Villamor B. Gamponia to
2 Yohannes Mariam, 6/16/2006 Re MARS Outputs and
3 Documentation

4 91 JAD-11: E-mail from Villamor B. Gamponia to
5 Yohannes Mariam, 3/9/2005 Re PSE's Weather
6 Station Data

7 CROSS-EXAMINATION EXHIBITS

8 Staff

9 92 PSE's Response to WUTC Staff Data Request No.
10 401

11 93 PSE's Response to WUTC Staff Data Request No.
12 402

13 94 PSE's Response to WUTC Staff Data Request No.
14 403

15 95 PSE's Response to WUTC Staff Data Request No.
16 404

17 96 "Modeling & Weather Normalization of
18 Whole-House Metered Data for Residential
19 End-Use Load Shape Estimation" by IEEE

20 97 "Modeling the Effect of Weather in Short-Term
21 Electricity Load Forecasting by" Hyde and
22 Hodnett

23 98 PSE'S Response to WUTC Staff's Data Request
24 No. 336

25

0955

1 W. JAMES ELSEA
2 101HC WJE-1HCT: Prefiled Direct Testimony re
3 quantitative analyses in RFP process
4 102 WJE-2: Witness qualifications
5 103 WJE-3: Excerpt from 2005 Least Cost
6 Plan-Natural Gas Price Forecasts
7 104 WJE-4: Excerpt from 2005 Least Cost
8 Plan-Electric Analysis and Results
9 105HC WJE-5HC: Assumptions for Financial Pro Forma
10 PUD No. 1 of Chelan County Power Sales
11 Agreement and Transmission Agreement
12 106HC WJE-6HC: Proposed Power Sales Agreement with
13 PSE Pro Forma Income Statement
14 107HC WJE-7HC: Resource Need, Portfolio and Market
15 Benefits arising from Power Sales Agreement
16 and Transmission Agreement
17 108 WJE-8: Modeling Tools and analysis
18 109 WJE-9: The Aurora Dispatch Model
19 110 WJE-10: NERC U.S. Interconnection Map
20 111 WJE-11: Schematic showing AURORA Subareas in
21 WECC Region
22 112 WJE-12: PSE's Average Hourly Hydrology
23 113 WJE-13: PSE's Average Hourly Generation in
24 Mid-Columbia Basis
25 114 WJE-14: Generation Forecasts - 60 Year

0956

1 Average
2 115 WJE-15: Standard & Poor's "Buy versus Build":
3 Debt Aspects of Purchased-Power Agreements,
4 (May 8, 2003)
5 116 WJE-16: Standard & Poor's Ratings Direct--PSE
6 (May 13, 2005)
7 117 WJE-17: AURORA 6 Forecast Development and
8 Volatility
9 118HC WJE-18HC: Quantitative Evaluation "All
10 Source" Resource Bids--Assumptions, Outputs,
11 and Key Issues (July 26, 2004)
12 119HC WJE-19HC: Acquisition Modeling Quantitative
13 Evaluation "All Source" Resource Bids
14 (September 30, 2004)
15 120 WJE-20: Stage I--Review of All Source RFP Bid
16 Costs
17 121HC WJE-21HC: 2004 All-Source Generation RFP
18 "Short List"
19 122HC WJE-22HC: 2004 All-Source Generation RFP
20 "Short List" and "Continuing Investigation
21 List"
22 123HC WJE-23HC: Thirty-seven Portfolios Considered
23 in Stage 2 Analysis
24 DONALD E. GAINES
25 131C DEG-1CT: Prefiled Direct Testimony re capital

0957

1 structure and cost of capital (overall ROR)
2 132 DEG-2: Witness Qualifications
3 133 DEG-3: Standard & Poor's publication dated
4 May 8, 2003: "Buy Versus Build": Debt Aspects
5 of Purchased Power Agreements
6 134 DEG-4: Summary of Rate Cases Decided Between
7 1/1/2005 and 12/31/2005
8 135 DEG-5: Standard & Poor's Corporate Ratings
9 Criteria
10 136C DEG-6C: Utility Capital Structure--Rate Year
11 (January - December 2007)
12 137C DEG-7CT: Rebuttal Testimony re capital
13 structure and rate of return and PCA mechanism
14 138 DEG-8: Rates of Return Comparison (Gaines
15 Rebuttal, Gaines Direct, Hill, Gorman)
16 139 DEG-9: Staff Response to PSE DR 98
17 140C DEG-10C: Utility Capital Structure Cost of
18 Capital and Rate of Return
19 141 DEG-11: Staff Response to PSE DR 67
20 142 DEG-12: Cost of 2% More Equity in Capital
21 Structure
22 143HC DEG-13HC: PSE Response to Staff DR 055 (PSE's
23 most recent Rating Agency Presentation)
24 144HC DEG-14HC: PSE Response to Staff DR 070
25 145 DEG-15: PSE Response to Staff DR 059

0958

1 146 DEG-16: Staff Response to PSE DR 116
2 147 DEG-17: Summary of Rate Cases Decided Between
3 1/1/2005 and 6/30/2006
4 148 DEG-18: Staff Response to PSE DR 70
5 149 DEG-19: 2d Q 2006 Infrastrux Sale Disposition
6 of Proceeds
7 CROSS-EXAMINATION EXHIBITS
8 Staff
9 150 Excerpts of PSE SEC Form 10-K, Annual Report
10 for fiscal year ending December 31, 2002-2005
11 and SEC Form 10-Q for quarter ending June 30,
12 2006
13 151 Excerpts of PSE SEC Form 10-K, for fiscal year
14 ending December 31, 2005
15 152 PSE Daily Stock Prices 1/3/2005 - 9/19/2006
16 749 Response to Staff Data Request No. 409
17 ROGER GARRATT
18 153HC RG-1HCT: Prefiled Direct Testimony re Wild
19 Horse, Ormat, Hopkins Ridge
20 154 RG-2: Witness Qualifications
21 155HC RG-3HC: Wild Horse Wind Project Capital Costs
22 156HC RG-4HC: Wild Horse Construction Schedule and
23 Progress as of 31-Jan-06
24 157HC RG-5HC: Wild Horse Project O&M
25 158HC RG-6HC: Narrative Q&A providing description

0959

1 of modeling tools and analyses used to
2 evaluate responses to PSE's 2004 RFP
3 159HC RG-7HC: Wind RFP Stage 2 Evaluation Process &
4 Review
5 160HC RG-8HC: Presentation to Commission Staff re
6 Resources Acquisition 2004 Wind RFP, June 4,
7 2004
8 161HC RG-9HC: All-Source RFP Stage 1 Evaluation
9 Process & Review (Draft of May 13, 2004)
10 162HC RG-10HC: All-Source-RFP Stage 1 Evaluation
11 Power Point Presentation (May 13, 2004)
12 163HC RG-11HC: Presentation to Commission Staff re
13 All-Source RFP Stage 1 Evaluation Review--All
14 Source RFP, June 4, 2004
15 164HC RG-12HC: Presentation to Commission Staff re
16 Resources Acquisition--2004 All Source RFP,
17 September 30, 2004
18 165 RG-13: Least Cost Plan Advisory Group Meeting
19 Presentation October 12, 2004
20 166 RG-14T: Rebuttal Testimony re Status of Wild
21 Horse
22 167HC RG-15HC: Wild Horse Construction Schedule and
23 Progress as of July 31, 2006
24 168HC RG-16HC: Wild Horse Project Costs
25

0960

1 KIMBERLY J. HARRIS
2 171 KJH-1T: Prefiled Direct Testimony (Overview
3 of PSE case)
4 172 KJH-2: Witness Qualifications
5 173 KJH-3: Rebuttal Testimony (Overview of
6 Rebuttal case)
7 CROSS-EXAMINATION EXHIBITS
8 Staff
9 174 WUTC Regulated Utility Rate History, April
10 2002-July 2006
11 Public Counsel
12 175 PSE's Response to Public Counsel's Data
13 Request No. 91 (Referencing PSE's Response to
14 Public Counsel's Data No. 97)
15 176 PSE's Response to Public Counsel's Data
16 Request No. 92
17 177 Excerpt from March 14, 2006 Proxy Statement
18 (found in full at Exhibit 219)
19 178 PSE August 29, 2006 Press Release re: PGA
20 filing
21 179 PSE's Response to Public Counsel's Data
22 Request No. 90
23 DAVID W. HOFF
24 181 DWH-1T: Prefiled Direct Testimony re electric
25 cost of service

0961

1 182 DWH-2: Professional Qualifications
2 183 DWH-3: PSE Proposed Electric Cost of Service
3 Summary Adjusted Test Year - 12 Months ended
4 September 2005 (7/7/06 update to
5 Ex. 194 (JAH-4)
6 184 DWH-4: Commission basis Electric Cost of
7 Service Summary Adjusted Test Year - 12 Months
8 ended September 2005 (7/7/06 update to
9 Ex. 195 (JAH-5)
10 185 DWH-5: Summary of Electric Parity Ratios
11 (with 7/7/06 updates)
12 186 DWH-6T: Rebuttal Testimony re Residential Gas
13 Customer Charge, Costs of Weather Adjustment
14 Data, Rate Impact of PCA Sharing Band
15 187 DWH-7: Comparison of Residential Customer
16 Costs--PSE Proposed, Commission Basis, and
17 Joint Parties
18 188 DWH-8: Revenue Stability-Monthly Variation
19 189 DWH-9: Analysis of Customer Charge Bill
20 Impacts
21 190 DWH-10: Estimate of Additional Cost the
22 Company Would Incur To Carry Out Additional
23 Work of Collecting and Analyzing Weather
24 Adjustment Data if so Ordered by the
25 Commission

0962

1 DAVID W. HOFF (adopting James A. Heidell)
2 191 JAH-1T: Prefiled Direct Testimony re electric
3 cost of service, rate spread, rate design, and
4 temperature adjustment
5 192 JAH-2: Professional Qualifications
6 193 JAH-3: Electric Cost of Service, Derivation
7 of Peak Credit
8 194 JAH-4: PSE Proposed Electric Cost of Service
9 Summary - Adjusted Test Year 12 Months Ended
10 9/30/2005
11 195 JAH-5: Commission Basis Electric Cost of
12 Service Summary - Adjusted Test Year 12 Months
13 Ended 9/30/2005
14 196 JAH-6: PSE Proposed Rate Spread Summary 12
15 Months Ended 9/30/2005
16 197 JAH-7: Summary of Residential Basic Charges
17 198 JAH-8: Proposed Electric Depreciation Tracker
18 Schedule 124 Rate Calculation for 12 Months
19 Ended 9/30/2005
20 199 JAH-9: Proposed Tariff Sheets (version
21 revised June 7, 2006)
22 CROSS-EXAMINATION EXHIBITS
23 Public Counsel
24 200 PSE's Response to WUTC Staff's Data Request
25 No. 379

0963

1 201 PSE's Response to Public Counsel's Data
2 Request No. 72
3 202 PSE's Response to Public Counsel's Data
4 Request No. 76 (Referencing PSE's Response to
5 Public Counsel's Data Request No. 13)
6 Staff
7 203 Exhibit No. 304 in Docket UE-040640
8 204 PSE Response to Staff Data Request No. 412
9 TOM M. HUNT
10 211 TMH-1T: Prefiled Direct Testimony re wages
11 and incentive plans
12 212 TMH-2: Witness Qualifications
13 213C TMH-3C: Historic Merit Pay Increases
14 214C TMH-4C: Energy Services Market Comparison
15 Employer Paid Benefits for Salaried Employees
16 215C TMH-5C: Energy Services Market Comparison
17 Employer Paid Benefits for Union Employees
18 216 TMH-6: PSE 2005 Goals & Incentive Plan
19 217 TMH-7: PSE Employee Energy Connection--2005
20 Goals Program-Making the Connection!
21 218C TMH-8CT: Rebuttal Testimony re Incentive Pay
22 Adjustments and Wage Adjustments
23 219 TMH-9: Notice of Annual Meeting to PSE
24 Shareholders
25 220 TMH-10: Letter Agreement between IBEW Local

0964

1 #77 and PSE
2 CROSS-EXAMINATION EXHIBITS
3 Staff
4 221C PSE Response to WUTC Staff Data Request No.
5 215 (Confidential)
6 KARL R. KARZMAR
7 222 KRK-1T: Prefiled Direct Testimony re gas
8 results of operations (revenue requirement),
9 changes to PGA re addition of line of credit
10 for hedging, PCA and decoupling
11 223 KRK-2: Professional Qualifications
12 224 KRK-3: Gas Income Statement for 12 Months
13 Ended 9/30/2003 and 9/30/2005
14 225 KRK-4: Gas Results of Operations for 12 Months
15 Ended 9/30/2005 - General Rate Increase
16 226 KRK-5: Gas General Rate Increase for 12
17 Months Ended 9/30/2005
18 227 KRK-6: Gas Attrition 12 Months Results of
19 Operations
20 228 KRK-7: Supplemental Prefiled Direct Testimony
21 re Attrition
22 229 KRK-8: Supplemental Prefiled Direct Testimony
23 re Calculation of Adjusted Test Period Results
24 of Operations
25 230 KRK-9: Gas Results of Operations for Twelve

0965

1 Months Ended Sept. 30, 2005, Revised
2 231 KRK-10: Gas General Rate Increase for 12
3 Months Ended 9/30/2005
4 232C KRK-11CT: Rebuttal Testimony re Gas and Common
5 Revenue Requirement and impact of weather
6 variability
7 233 KRK-12: Gas Results of Operations for 12
8 Months Ended 9/30/2005
9 234 KRK-13: Gas General Rate Increase for 12
10 Months Ended 9/30/2005
11 CROSS-EXAMINATION EXHIBITS
12 Public Counsel
13 235 PSE's Response to Public Counsel's Data
14 Request No. 6
15 236 PSE's Response to Public Counsel's Data
16 Request No. 7
17 237 PSE's Response to Public Counsel's Data
18 Request No. 74
19 238 PSE's Response to Public Counsel's Data
20 Request No. 77
21 SUSAN MCLAIN
22 241C SML-1T: Prefiled Direct Testimony re need for
23 infrastructure investments
24 242 SML-2: Witness Qualifications
25 243 SML-3: 2004 Electric Non-production/

0966

1 generation O&M per Customer
2 244C SML-4C: T&D Capital Expenditures by Energy,
3 by Category--Gas & Electric Capital
4 245 SML-5T: Rebuttal Testimony re O&M costs and
5 capital investment, PCA or alternative, Spirit
6 Ridge, Tree Watch
7 246 SML-6: PSE Non-revenue Producing Transmission
8 and Distribution Investments Study
9 747 SML-7T: Sur-surrebuttal testimony in response
10 to Russell surrebuttal re PSE proposed
11 alternative to depreciation tracker
12 CROSS-EXAMINATION EXHIBITS
13 Staff
14 247 PSE Response to WUTC Staff Data Request No.
15 393
16 748C Response to Staff Data Request No. 408
17 Public Counsel
18 248 PSE's Response to Public Counsel's Data
19 Request No. 88
20 249 PSE's Response to Public Counsel's Data
21 Request No. 89
22 250 PSE's Response to Public Counsel's Data
23 Request No. 70
24 DAVID E. MILLS
25 251C DEM-1CT: Prefiled Direct Testimony re power

0967

1 costs and risk management

2 252 DEM-2: Professional Qualifications

3 253 DEM-3: PSE Energy Management Committee

4 Charter, August 18, 2005

5 254C DEM-4C: Core Gas Hedging Matrix

6 255C DEM-5C: Margin at Risk and Forward Hedging

7 256C DEM-6C: Hedging Strategy for 6 to 18 Months

8 time frame

9 257C DEM-7C: Exposure Chart

10 258C DEM-8C: PSE's and its Currently Approved

11 Counterparties' Credit Ratings

12 259C DEM-9C: Master Agreements Under Which PSE May

13 Be Required To Post Collateral

14 260 DEM-10: 2006 GRC Power Cost Projections Rate

15 Year AURORA + non-AURORA Power Costs 1.9.06

16 Model Run

17 261 DEM-11: Energy Information Administration

18 Brochure: Residential Natural Gas Prices:

19 What Consumers Should Know

20 262C DEM-12C: PSE Merchant Cross-Cascades

21 Transmission Needs--Energy Resources

22 Presentation to EMC October 11, 2005

23 263 DEM-13: 2006 GRC vs. 2005 GRC Power Cost

24 Projections

25 264 DEM-14: 2006 GRC Power Cost Projections Rate

0968

1 Year AURORA + non-AURORA Power Costs 1.9.06
2 Model Run w/ and w/o Wild Horse
3 265 DEM-15T: Supplemental Prefiled Direct
4 Testimony re updated power costs
5 266 DEM-16: 2006 GRC Power Cost Projections Rate
6 Year AURORA + non-AURORA Power Costs 6.15.06
7 Model Run
8 267 DEM-17: PSE 2006 GRC Supplemental Update Rate
9 Year Power Costs
10 268 DEM-18: 2006 GRC Power Cost Projections Rate
11 Year AURORA + non-AURORA Power Costs 6.15.06
12 Model Run w/ and w/o Wild Horse
13 269C DEM-19: Rebuttal Testimony re power costs
14 270 DEM-20: Rebuttal Power Cost Projections--Rate
15 Year AURORA + Non-AURORA Power Costs--3-month
16 average gas prices at 5/23/06
17 271 DEM-21: 2006 GRC Rebuttal Rate Year Power
18 Costs
19 272 DEM-22: Rebuttal Power Cost Projections--Rate
20 Year AURORA + Non-AURORA Power Costs--3-month
21 average gas prices at 5/23/06
22 (W/ and W/O White Horse)
23 CROSS-EXAMINATION EXHIBITS
24 ICNU
25 273 ICNU Response to PSE DR No. 51

0969

1	274	BPA Load Resource Study
2	275	Comparison of Hydro Shape
3	276	PSE Response to ICNU DR No. 03.133
4	277	ICNU Response to PSE DR No. 56
5	278	CCCT Contracts
6	279C	PSE AURORA Minimum Up/Down Times
7	280C	Contract Minimum Up/Down Times
8	281	GE Energy Turbine Operation/Maintenance
9	282C	PSE Response to Joint DR No. 15
10	283C	Transaction Categorization Comparison
11	284C	PSE Response to Joint DR No. 13
12	285C	Fixed Power Contracts
13	286C	PSE Response to Joint DR No. 14
14	287C	Fixed Gas Adjustment
15	288C	PSE Response to Joint DR No. 22
16	289C	Sumas Forward Prices - 6/01/05 thru 9/21/06
17	290C	(Records requisition to PSE) Minimum up times
18		and down times for PSE resources included in
19		Aurora
20	JOEL L. MOLANDER	
21	291HC	JLM-1HCT: Prefiled Direct Testimony re
22		purchased power agreements (Rocky Reach and
23		Rock Island hydro resources)
24	292	JLM-2: Witness Qualifications
25	293	JLM-3: Power Sales Agreement between PUD No.

0970

1 1 of Chelan County and PSE, dated February 1,
2 2006
3 294HC JLM-4HC: Memo from Eric Markell to PSE Board
4 of Directors re proposed Power Sales Agreement
5 w/ Chelan County PUD
6 295 JLM-5: Long-Term Transmission Service
7 Agreement between Chelan County PUD and PSE,
8 dated February 1, 2006
9 ROGER A. MORIN
10 301 RAM-1T: Prefiled Direct Testimony re cost of
11 capital
12 302 RAM-2: Professional Qualifications
13 303 RAM-3: Investment-Grade Combination Gas &
14 Electric Utilities Beta Estimates
15 304 RAM-4: CAPM, Empirical CAPM
16 305 RAM-5: Moody's Electric Utility Common Stocks
17 Over Long-Term Treasury Bonds Annual Long-Term
18 Risk Premium Analysis
19 306 RAM-6: Moody's Gas Distribution Common Stocks
20 Over Long-Term Treasury Bonds Annual Long-Term
21 Risk Premium Analysis
22 307 RAM-7: Combination Gas & Electric Utilities
23 Historical Growth Rates
24 308 RAM-8: Combination Gas & Electric Utilities
25 DCF Analysis Value Line Growth Projections

0971

1 309 RAM-9: Combination Gas & Electric Utilities
2 DCF Analysis Value Line Growth Projections w/
3 3 additional companies
4 310 RAM-10: Combination Gas & Electric Utilities
5 DCF Analysis Analyst's Growth Forecasts
6 311 RAM-11: Combination Gas & Electric Utilities
7 DCF Analysis Analyst's Growth Projections w/ 3
8 additional companies
9 312 RAM-12: Natural Gas Utilities DCF Analysis
10 Analysts' Growth Forecasts
11 313 RAM-13: Natural Gas Utilities DCF Analysis
12 Value Line Growth Forecasts
13 314 RAM-14: CAPM, Empirical CAPM Flotation Costs
14 315 RAM-15T: Rebuttal Testimony re Return on
15 Equity
16 316 RAM-16: Morin, R. A., Regulatory Finance:
17 Utilities' Cost of Capital, Chapter 6, Public
18 Utilities Reports, Inc., Arlington, VA 1994
19 317 RAM-17: Statistical Analysis of Mr. Hill's
20 Comparable Group of Electric Utilities
21 318 RAM-18: Arithmetic versus Geometric Means in
22 Estimating the Cost of Capital
23 319 RAM-19: Excerpt from Direct Testimony of
24 Stephen G. Hill on behalf of Public Counsel in
25 WUTC Docket UE-040641, 9/13/2004

0972

1 320 RAM-20: Excerpt from Direct Testimony of
2 Stephen G. Hill on behalf of Public Counsel in
3 WUTC Docket UE-050684, 11/3/2005

4 321 RAM-21: Morin, R. A., Regulatory Finance:
5 Utilities' Cost of Capital, Excerpt from
6 Chapter 5, Public Utilities Reports, Inc.,
7 Arlington, VA 1994

8 322 RAM-22: Excerpt from Direct Testimony of
9 Michael P. Gorman on behalf of ICNU in WUTC
10 Docket UE-050684, 11/3/2005

11 323 RAM-23: Excerpt from Direct Testimony of
12 Michael P. Gorman on behalf of ISG Sparrows
13 Point LLC in PSC of Maryland Case No. 9036,
14 8/15/2005

15 324 RAM-24: Excerpt from Rebuttal Testimony of
16 Roger A. Morin on behalf of PSE in this
17 proceeding

18 CROSS-EXAMINATION EXHIBITS

19 ICNU

20 325 PSE Response to ICNU DR No. 07.144

21 326 PSE Response to ICNU DR No. 07.148

22 Staff

23 327 "New Regulatory Finance" by Roger A. Morin,
24 Ph.D., June 2006 (excerpt)

25 328 PSE Response to WUTC Staff Data Request No.

0973

1 102

2 329 PSE Response to WUTC Staff Data Request No.

3 208

4 330 "The Equity Premium Consensus Forecast

5 Revisited" by Ivo Welch, September 2001,

6 Cowles Foundation Discussion Paper No. 1325

7 331 "The Shrinking Equity Premium, Historical

8 facts and future forecasts" by Jeremy J.

9 Siegel

10 332 "The Equity Premium" by Fama and French, April

11 2002

12 333 "Long-Run Stock Returns: Participating in the

13 Real Economy" by Roger G. Ibbotson & Peng Chen

14 334 "What Risk Premium is "Normal"?" by Robert D.

15 Arnott & Peter L. Bernstein

16 335 "The Equity Risk Premium in January 2006:

17 Evidence from the Global CFO Outlook Survey"

18 by John R. Graham & Campbell R. Harvey

19 336 PSE Response to WUTC Staff Data Request No.

20 363 (with PSE errata)

21 337 PSE Response to WUTC Staff Data Request No.

22 352

23 338 PSE Response to WUTC Staff Data Request No.

24 365

25 339 PSE Response to WUTC Staff Data Request No.

0974

1		353
2	340	PSE Response to WUTC Staff Data Request No.
3		357
4	341	PSE Response to WUTC Staff Data Request No.
5		358
6	342	PSE Response to WUTC Staff Data Request No.
7		359
8	343	PSE Response to WUTC Staff Data Request No.
9		360
10	344	PSE Response to WUTC Staff Data Request No.
11		361
12	345	PSE Response to WUTC Staff Data Request No.
13		366
14	346	PSE Response to WUTC Staff Data Request No.
15		372
16	ICNU	
17	347	ICNU Response to PSE DR No. 22
18	348	ICNU Response to PSE DR No. 26
19	Staff	
20	349	Moody's Electric Utility Common Stocks Over
21		Long-Term Treasury Bonds -- Annual Long Term
22		Risk Premium Analysis
23	KRIS OLIN	
24	351HC	KO-1HCT: Prefiled Direct Testimony re Baker
25		River relicensing and Muckleshoot Arbitration

0975

1 Decision
2 352 KO-2: Professional Qualifications
3 353 KO-3: Baker River Relicensing Activities
4 Chronology 1995-2005
5 354 KO-4: Baker River Hydroelectric Project
6 Comprehensive Settlement Agreement
7 355HC KO-5HC: Memo of April 15, 2004, from Energy
8 Production and Storage Staff to Ed Schild re
9 Assessment of Baker River Hydroelectric
10 Project Alternatives
11 356HC KO-6HC: Update of November 12, 2004 to April
12 15, 2004, from Energy Production and Storage
13 Staff to Ed Schild re Assessment of Baker
14 River Hydroelectric Project Alternatives
15 357C KO-7C: Baker River Relicensing Costs
16 358C KO-8C: Baker River Increases to O&M Budget -
17 2007
18 359C KO-9C: Arbitration Award in the matter of the
19 Muckleshoot Indian Tribe and PSE
20 360 KO-10T: Rebuttal Testimony re Baker Relicense
21 and Muckleshoot Settlement
22 361 KO-11: Notice re Public Meeting on DEIS for
23 Baker River Hydro Project
24 CALVIN E. SHIRLEY
25 371 CES-1T: Prefiled Direct Testimony re electric

0976

1 energy efficiency incentive mechanism and new
2 demand response program options
3 372 CES-2: Witness Qualifications
4 373 CES-3: Settlement Terms for Conservation in
5 PSE GRC Dockets UE-011507 and UG-011571
6 374 CES-4: Electric Energy Efficiency Incentive
7 Mechanism
8 375 CES-5: Conservation Program Cost
9 Effectiveness, Revised 12/21/2005
10 376 CES-6: Calculation Methodology for Electric
11 Energy Efficiency Incentive Mechanism
12 377 CES-7: Conservation Program Measurement &
13 Evaluation Plan, 11/29/2005
14 378 CES-8: Conservation Program Descriptions,
15 Revised 12/21/2005
16 379 CES-9T: Rebuttal Testimony re Electric Energy
17 Efficiency Mechanism, New Electric Demand
18 Response Options, Gas Energy Efficiency, Low
19 Income Weatherization
20 380 CES-10: Net Present Value of Energy Benefits,
21 Transmission Related Costs, and Net Savings
22 from Electric Energy Efficiency
23 381 CES-11: Modified PSE Incentive Mechanism
24 (August 2006)
25 382 CES-12: Comparison of Proposed Electric Energy

0977

1 Efficiency Incentive Mechanisms
2 383 CES-13: Requirements on Electric Efficiency
3 Incentive Mechanism
4 384 CES-14: Memo 6/30/2006 re "Why and when should
5 Northwest Energy Efficiency Alliance
6 discontinue counting savings?"
7 385 CES-15: Original Sheet Nos. 121 and 121a, PSE
8 Tariff WN-U-60, Electricity Conservation
9 Mechanism
10 386 CES-16: PSE Response to NWECC DR 26
11 387 CES-17: Public Counsel Response to PSE DR 3
12 388 CES-18: Staff Response to PSE DR 127
13 389 CES-19: Public Counsel Response to PSE DR 10
14 390 CES-20: NWECC Response to PSE DR 16
15 391 CES-21: NWECC Response to PSE DR 18
16 392 CES-22: NWECC Response to PSE DR 21
17 393 CES-23: NWECC Response to PSE DR 19
18 CROSS-EXAMINATION EXHIBITS
19 Public Counsel
20 394 November 18, 2005 filing re: energy efficiency
21 targets
22 395 PSE's Response to Public Counsel's Data
23 Request No. 86
24 396 PSE's Response to Public Counsel's Data
25 Request No. 84

0978

1	397	PSE's Response to NWEK's Data Request No. 2
2	398	PSE's Response to NWEK's Data Request No. 16
3	399	PSE's Response to NWEK's Data Request No. 21
4	400	PSE's Response to Public Counsel's Data
5		Request No. 20
6	401	PSE's Response to Public Counsel's Data
7		Request No. 28
8	402	PSE's Response to Public Counsel's Data
9		Request No. 29
10	403	PSE's Response to Public Counsel's Data
11		Request No. 30
12	404	PSE's Response to Public Counsel's Data
13		Request No. 31
14	405	PSE's Response to WUTC Staff's Data Request
15		No. 224
16	406	PSE's Response to WUTC Staff's Data Request
17		No. 225
18	407	PSE's Response to WUTC Staff's Data Request
19		No. 226
20	408	PSE's Response to NWEK's Data Request No. 17
21	409	PSE's Response to NWEK's Data Request No. 22
22	410	PSE's Response to NWEK's Data Request No. 23
23	411	PSE's Response to NWEK's Data Request No. 26
24	414	PSE Response to Public Counsel Data Request
25		No. 98

0979

1 NWEC
2 412 PSE's 2005 Least Cost Plan, Section VII, page
3 10. (premarked as Exhibit ___(SDW-4)
4 Staff
5 413 PSE Response to Staff Data Request No. 406
6 JOHN H. STORY
7 421 JHS-1T: Prefiled Direct Testimony re electric
8 results of operations (revenue requirement)
9 422 JHS-2: Professional Qualifications
10 423 JHS-3: Income Statement for 12 Months Ended
11 9/30/2003 and 9/30/2005
12 424 JHS-4: Results of Operations for 12 Months
13 Ended 9/30/2005 - General Rate Increase
14 425 JHS-5: Electric General Rate Increase for 12
15 Months Ended 9/30/2005
16 426 JHS-6: Settlement Terms for the Power Cost
17 Adjustment Mechanism (PCA) per GRC settlement
18 in Dockets UE-011570 and UG-011571
19 427C JHS-7C: Indicative Credit Facility for
20 Hedging
21 428C JHS-8C: Proposed New and Revised Terms for
22 the PCA
23 429C JHS-9C: Exhibit A-1 Power Cost Rate (original
24 2/15/06 filing version)
25 430 JHS-10: Attrition Example

0980

1 431 JHS-11: Supplemental Prefiled Direct
2 Testimony (Attrition Calculations)
3 432 JHS-12: Results of Operations Adjusted for
4 PCA
5 433C JHS-13C: Memorandum from Matt Marcellia to
6 John Story and Jim Eldredge, 12/19/2005 re
7 Discussion of PSE's Normalization Methodology
8 for Deferred Taxes
9 434 JHS-14: PTCs in the 190 Deferred Tax Account
10 435 JHS-15: Supplemental Prefiled Direct
11 Testimony re updated results of operations to
12 reflect power cost changes per 2006 PCORC
13 436 JHS-16: Results of Operations for Twelve
14 Months Ended Sept. 30, 2005, Revised
15 437 JHS-17: Rate Base/Rate of return
16 438 JHS-18: Exhibit A-1 Power Cost Rate (updated
17 version 7/7/06)
18 439 JHS-19T: Rebuttal Testimony re Electric
19 Revenue Requirement, Utility Operations and
20 Tracker Mechanisms
21 440 JHS-20: PSE Results of Operations for the 12
22 Months Ended September 30, 2005
23 441 JHS-21: Electric General Rate Increase for the
24 12 Months Ended September 30, 2005
25 442C JHS-22C: Exhibit A-1 Power Cost Rate (updated

0981

1 version 8/23/06)

2 443 JHS-23: 2002 Utility Operations

3 444 JHS-24: Direct Testimonies of Jim Lazar,
4 Merton R. Lott on behalf of Public Counsel,
5 Power Cost Adjustment, Docket UE-011570

6 445 JHS-25: Revenue Deficiency Associated with Net
7 Additions to Rate Base of Non-Revenue
8 Producing Transmission and Distribution Plant
9 October 2005 Through June 2006

10 746 JHS-26T: Sur-surrebuttal testimony in response
11 to Russell surrebuttal re PSE proposed
12 alternative to depreciation tracker

13 CROSS-EXAMINATION EXHIBITS

14 Staff

15 446 PSE Schedule 7

16 447 PSE Schedule 85

17 751 PSE Response to Staff Data Request No. 407

18 Public Counsel

19 448 PSE's First Supplemental Response to
20 Staff's Data Request No. 328

21 449 PSE's Response to Staff's Data Request No. 329

22 450 PSE's Response to Staff's Data Request No. 264

23 FEA

24 752 PSE Response to FEA Data Request No. 03-001

25

0982

1 BERTRAND A. VALDMAN

2 451C BAV-1CT: Prefiled Direct Testimony re PSE's
3 financial condition, credit rating, and market
4 conditions

5 452 BAV-2: Professional Qualifications

6 453 BAV-3: 2004 Net Plant, Operating Cash Flow,
7 and Firm Value - Peer Comparative

8 454 BAV-4: Moody's Sourcebook excerpt (p. 139)

9 455 BAV-5: Research Reports from various market
10 analysts

11 456 BAV-6: Comparative ROE Attributes of US Local
12 Gas Distribution Companies

13 457C BAV-7CT: Rebuttal Testimony re cost of money
14 and opportunity to earn ROE (PCA
15 modifications, depreciation tracker and
16 decoupling)

17 458 BAV-8: Summaries of Morin, Hill and Gorman ROE
18 Estimates

19 459 BAV-9: JP Morgan North America Equity Research
20 re Puget Energy

21 460 BAV-10: Staff Response to PSE DR 80

22 461 BAV-11: Authorized Returns on Equity of
23 Mr. Hill's Comparable Group of Electric
24 Utilities

25 462 BAV-12: Authorized Returns on Equity of

0983

1 Mr. Hill's Comparable Group of Natural Gas
2 4Utilities
3 463 BAV-13: Authorized Returns on Equity of
4 Mr. Hill's Comparable Group of Combination
5 Utilities
6 CROSS-EXAMINATION EXHIBITS
7 Staff
8 464 PSE Response to WUTC Staff Data Request No.
9 398
10 465 Valdman Rebuttal Workpapers ROE History
11 Public Counsel
12 466 PSE Form 10-Q Filed: August 4, 2006
13 467 PSE's Response to Staff's Data Request No. 168
14 468 PSE's Response to Joint Data Request No. 9
15 469 PSE's Response to Joint Data Request No. 10
16 470 PSE's Response to Joint Data Request No. 11
17 771 PSE Response to Joint DR 24
18 772 PSE Response to Joint DR 25 (pp. 24, 25, 30)
19 773 1979 PSE Annual Report
20 ERIC M. MARKELL
21 611HC EMM-1HCT: Prefiled Direct Testimony
22 612 EMM-2: Witness Qualifications
23 613 EMM-3: Geographic Location of PSE's Electric
24 Portfolio Resources
25 614 EMM-4: PSE 2004 Sources of Energy

0984

1 615 EMM-5: PSE April 2005 Least-Cost Plan -
2 Electric Resources
3 616 EMM-6: PSE April 2005 Least-Cost Plan - Gas
4 Supply-Side Portfolio Resources
5 617 EMM-7: Energy Load Resource Balance - Project
6 Resource Need
7 618C EMM-8C: Request for Approval by Energy
8 Resources Committee of Proposed Energy
9 Resource Acquisition
10 619HC EMM-9HC: Minutes of Board of Directors'
11 Meeting December 15, 2004 & Summary of
12 Resource Acquisition and Process Update
13 620HC EMM-10HC: Minutes of Board of Directors'
14 Meeting 4/6/04 - PSE Energy Resources
15 Update
16 621HC EMM-11HC: Minutes of Board of Director's
17 Meeting 7/13/04 - Resource Acquisition
18 Update
19 622HC EMM-12HC: Record of the Board and Officers'
20 Strategic Planning Retreat September 14, 2004/
21 PSE Base Case & Strategic Investment
22 Opportunities
23 623HC EMM-13HC: Minutes of Board of Directors'
24 Meeting October 5, 2004 & Resource Acquisition
25 Update

0985

1 624HC EMM-14HC: Minutes of Board of Directors'
2 Meeting September 13, 2005 & Approval of PSE
3 Purchase of Wild Horse Wind Power Facility
4 625HC EMM-15HC: Wind Turbine Supply & Installation
5 Agreement
6 626HC EMM-16HC: Wild Horse Wind Project Index of
7 Transaction Documents
8 627HC EMM-17HC: Overview of PSE's Baker River
9 Hydroelectric Project
10 ICNU
11 MICHAEL P. GORMAN
12 471C MPG-1CT: Prefiled Response Testimony re rate
13 of return on equity, capital structure and
14 overall rate of return
15 472 MPG-2: Witness Qualifications
16 473 MPG-3: Rate of Return at 9.9% ROE
17 474 MPG-4: Credit Rating Reports
18 475 MPG-5: Comparable Group
19 476 MPG-6: Growth Rate Estimates
20 477 MPG-7: Constant Growth DCF Model
21 478 MPG-8: GDP and Dividend Growth Rates
22 479 MPG-9: Electric Common Stock Market/Book
23 Ratio
24 480 MPG-10: Equity Risk Premium--Treasury Bond
25 481 MPG-11: Equity Risk Premium--Utility Bond

0986

1 482 MPG-12: Annual Average Yields
2 483 MPG-13: Series "A" and "Baa" Utility Bond
3 Yields
4 484 MPG-14: Comparable Group Beta
5 485 MPG-15: CAPM Return Estimate
6 486 MPG-16: S&P Credit Rating Financial Ratios at
7 ROE of 9.9%; Rate of Return at 9.9%
8 487 MPG-17: S&P Stock Price Performance

9 FEDERAL EXECUTIVE AGENCIES

10 JAMES T. SELECKY

11 491 JTS-1T: Prefiled Response Testimony re
12 proposed revision to sharing bands and
13 proposed electric energy efficiency incentive
14 mechanism

15 RALPH C. SMITH

16 492 RCS-1T: Prefiled Response Testimony re
17 proposed depreciation tracker
18 493 Witness Qualifications

19 KROGER CO. (Fred Meyer Stores and Quality Food Centers)

20 KEVIN C. HIGGINS

21 494 KCH-1T: Prefiled Response Testimony re
22 depreciation tracker

23 NWIGU

24 DONALD W. SCHOENBECK

25 495 DWS-1T: Prefiled Response Testimony re gas

0987

1 depreciation tracker

2 496 DWS-2: Witness Qualifications

3 SEATTLE STEAM

4 STANLEY GENT

5 497 SG-1T: Prefiled Response Testimony re gas

6 depreciation tracker, gas rate spread and rate

7 design, and impact of interruptible customers

8 on PSE system

9 498 SG-2: PSE Response to Seattle Steam DR-006

10 CROSS-EXAMINATION EXHIBITS

11 Public Counsel

12 701 Seattle Steam Responses to Public Counsel Data

13 Request No. 2

14 702 Seattle Steam Responses to Public Counsel Data

15 Request No. 3

16 703 Seattle Steam Responses to Public Counsel Data

17 Request No. 4

18 704 Seattle Steam Responses to Public Counsel Data

19 Request No. 7

20 705 Seattle Steam Responses to Public Counsel Data

21 Request No. 8

22 706 Seattle Steam Response to Public Counsel Data

23 Request No. 13

24

25

0988

1

NWEC

2

NANCY L. GLASER

3

499 NLG-1T: Prefiled Response Testimony re Calvin

4

Shirley testimony on new electric conservation

5

incentive mechanism, several DSM pilot

6

programs, and the budget for low income

7

weatherization

8

500 NLG-2: Witness Qualifications

9

501 NLG-3: Requirements on Electric Efficiency

10

Incentive Mechanism

11

STEVEN D. WEISS

12

502 SDW-1T: Prefiled Response Testimony re gas

13

revenue decoupling mechanism proposed via

14

Ronald J. Amen

15

503 SDW-2: Witness Qualifications

16

504 SDW-3T: Cross Answering Testimony to Brosch re

17

decoupling and Steward re decoupling

18

PUBLIC COUNSEL

19

MICHAEL L. BROSCHE

20

506C MLB-1TC: Prefiled Response Testimony re

21

depreciation tracker, decoupling

22

507 MLB-2: Witness Qualifications

23

508 MLB-1: Summary of Previously Filed

24

Testimony

25

509 MLB-4T: Cross-Answering Testimony re

0989

1 decoupling

2 ELIZABETH C. KLUMPP

3 510 ECK-1T: Prefiled Response Testimony re

4 incentive--penalty mechanism

5 511 ECK-2: Witness Qualifications

6 512 ECK-3: Electric Efficiency Incentive-Penalty

7 Mechanism - Public Counsel Proposal

8 513 ECK-4: Design Criteria for Electric

9 Efficiency Incentive Mechanism

10 514 ECK-5: PSE Response to ICNU DR-22

11 COMMISSION STAFF

12 JAMES M. RUSSELL

13 521 JMR-1T: Prefiled Response Testimony re

14 Electric and Gas Revenue Requirements,

15 Depreciation Trackers, and Power/Gas Supply

16 Prudence

17 522 JMR-2: Electric Results of Operations and

18 Revenue Requirement

19 523 JMR-3: PCA Baseline Rate

20 524 JMR-4: Gas Results of Operations & Revenue

21 Requirement

22 525 JMR-5: PSE's Recent Utility Earnings

23 526 JMR-6: Commission Order Excerpts on Attrition

24 527 JMR-7T: Surrebuttal Testimony re PSE

25 Alternative to Depreciation Tracker

0990

1 CROSS-EXAMINATION EXHIBITS
2 PSE
3 528 Staff Response to PSE DR 163
4 STEPHEN G. HILL
5 531C SGH-1TC: Prefiled Response Testimony
6 532 SGH-2: Professional Qualifications
7 533 SGH-3: Supplemental Testimony re Sustainable
8 Long-Term Growth
9 534 SGH-4: Sample Company Growth Rate Analyses
10 535 SGH-5: Supplemental Testimony re
11 Corroborative Equity Capital Cost Estimation
12 Methods
13 536 SGH-6: Hill, Stephen G., The Impact of
14 Decoupling on Electric Utility Operating Risk,
15 NARUC 4th National Conference on Integrated
16 Resource Planning, September 14, 1992
17 537 SGH-7: Moody's BAA Bond Yields: 1984-2005
18 and 1968-2006
19 538 SGH-8: PSE Recent Historical Capital
20 Structure
21 539 SGH-9: Electric Utility Sample Group
22 Selection
23 540 SGH-10: DCF Growth Rate Parameters
24 541 SGH-11: Comparable Companies' DCF Growth
25 Rates

0991

1 542 SGH-12: Comparable Companies' Stock Price,
2 Dividends, and Yields
3 543 SGH-13: Comparable Companies' DCF Cost of
4 Equity Capital
5 544 SGH-14: CAPM Cost of Equity Capital
6 545 SGH-15: Modified Earnings-Price Ratio Proof
7 546 SGH-16: Modified Earnings-Price Ratio
8 Analysis
9 547 SGH-17: Market-to-Book Ratio Analysis
10 548 SGH-18: Gas Utility Margin Volatility
11 549 SGH-19: PSE Overall Cost of Capital
12 550 SGH-20: Historical Bond v. Stock Volatility
13 551 SGH-21T: Cross-Answering Testimony re Cost of
14 Money
15 YOHANNES K.G. MARIAM
16 552 YKGM-1T: Prefiled Response Testimony re
17 Electric and Gas Weather Normalization
18 553 YKGM-2: Differences in Mean Temperature of
19 Counties Served by PSE
20 554 YKGM-3: Differences in Socioeconomic
21 Characteristics Among Counties Served by PSE
22 JOELLE R. STEWARD
23 561 JRS-1T: Prefiled Response Testimony re
24 Natural Gas Decoupling, Electric Conservation
25 Incentives and Electric Demand Response Pilots

0992

1 562 JRS-2: Professional Qualifications
2 563 JRS-3: Summary of Gas Revenue Normalization
3 Adjustment (GRNA a/k/a decoupling) Simulation
4 With and Without Weather Effects
5 564 JRS-4: Residential Use per Customer for New
6 Customers added in 2003 and 2004
7 565 JRS-5: Partial Decoupling with Modified New
8 Customer Adjustment
9 566 JRS-6: Use per Customer: 1995-2005
10 567 JRS-7: Proposed Electric Efficiency Incentive
11 Mechanism
12 568 JRS-8: Requirements for Electric Incentive
13 Mechanism
14 569 JRS-9T: Cross Answering Testimony re Electric
15 Conservation Incentive Mechanism and Natural
16 Gas Decoupling
17 CROSS-EXAMINATION EXHIBITS
18 Public Counsel
19 570 WUTC Staff's Response to Public Counsel's Data
20 Request No. 2
21 571 WUTC Staff's Response to Public Counsel's Data
22 Request No. 3
23 572 WUTC Staff's Response to Public Counsel's Data
24 Request No. 5
25 573 WUTC Staff's Response to Public Counsel's Data

0993

1 Request No. 6
2 574 Chart: Comparison of Electric Incentive
3 Proposals (Illustrative)
4 JOINT TESTIMONY OF JIM LAZAR, DONALD SCHOENBECK AND
5 JOELLE STEWARD
6 581 Joint-1T: Prefiled Response Testimony re
7 Natural Gas Rate Spread, Rate Design and Low
8 Income Bill Assistance
9 582 Joint-2: Jim Lazar Professional
10 Qualifications
11 583 Joint-3: Donald Schoenbeck Professional
12 Qualifications
13 584 Joint-4: PSE Response to Public Counsel Data
14 Request 005 (Commission-Basis Cost of Service
15 Study)
16 585 Joint-5: Joint Proposal of Commission Staff,
17 Public Counsel and the NW Industrial Gas Users
18 on Natural Gas Rate Spread, Rate Design and
19 Low-Income Bill Assistance
20 586 Joint-6: Joint Proposal of Commission Staff,
21 Public Counsel and the NW Industrial Gas Users
22 on Natural Gas Rates
23 587 Joint-7: PSE Customer Charge Calculation for
24 Residential Customers
25

0994

1 JOINT TESTIMONY OF YOHANNES MARIAM, JIM LAZAR AND DONALD
2 SCHOENBECK
3 588C (Joint-8TC): Response Testimony for Staff,
4 Public Counsel and ICNU re Power Cost
5 Adjustments
6 589C (Joint-9C): Additional Generating Capacity
7 590C (Joint-10C): PSE AURORA Specifications-Minimum
8 Up and Minimum Down Times
9 591C (Joint-11C): PSE Response to ICNU Data Request
10 No. 05.140
11 592 (Joint 12): 2006 GRC Power Cost Comparison -
12 Aurora Modeling
13 593C (Joint 13C): Joint Parties Fixed Price
14 Contract Adjustment with AURORA Modeling
15 Corrections
16 594C (Joint 14C): PSE Response to ICNU Data
17 Request No. 05.138
18 595C (Joint 15C): Analysis of PSE's Trades for
19 2006 through June 28 2006
20 596C (Joint 16C): Forward Price Adjustment with
21 PSE AURORA Results valuing AURORA Market
22 Purchases at Forward Market Prices
23 597C (Joint 17C): Forward Price Adjustment with
24 Joint Parties AURORA Results Valuing AURORA
25 Market Purchases at Forward Market Prices

0995

1 598 (Joint 18): 2006 GRC Power Cost Comparison
2 with Forward Pricing
3 599 (Joint 19T): Response Testimony for Staff,
4 Public Counsel and ICNU re Proposed Changes to
5 Power Cost Adjustment Mechanism
6 600C (Joint-20C): Earnings per Share Impact of
7 Existing PCA Mechanism and PSE Propose Changes
8 to PCA Mechanism

9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25