



***PRELIMINARY AGENDA***  
**Transmission Adequacy Steering Committee**  
**And**  
**Technical Workgroup Meeting**  
**January 17, 2006 – Portland, OR**  
**9:30 AM-3:30 PM – PDX Conference Center**  
**Bridge No. 360-418-8001 Passcode: 6060#**

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**9:30 – 11:30 TASC Meeting**

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|--|---------------|
| <b>1. Introductions, Arrangements, and Agenda Changes</b>            | Ravi/Dana     |
| <b>2. Action Items from January 4, 2006 TASC Conf. Call</b>          | Ravi Aggarwal |
| <b>3. Guidelines</b>   |               |
| a) <b>Approval of TAG for N-2 Load Service</b>                       | TASC          |
| b) <b>Load Area Examples for applicability of the N-2 Guidelines</b> | Ravi Aggarwal |
| <b>4. Next Steps</b>   | Ravi Aggarwal |

**12:30 PM – 3:30 PM TAWG Meeting**

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| <b>5. TAG Load Service Word Document</b> | All                |
| <b>6. N-1-1</b>                          | All                |
| <b>7. RAS Table (NWPP)</b>               | Gordon Dobson-Mack |
| <b>8. Next Steps/Assignments</b>         | All                |
| <b>9. Next Meeting</b>                   | Ravi Aggarwal      |



**NWPP Transmission Adequacy Steering Committee and Work Group Meeting  
January 17, 2006 – Portland, OR**

*Attendance List*

	<i>Name</i>	<i>Voting Member</i>	<i>Company</i>	<i>Phone Number</i>	<i>Email</i>
1	Ravi Aggarwal		BPA	360. 619-6681	<a href="mailto:rkaggarwal@bpa.gov">rkaggarwal@bpa.gov</a>
2	Rebecca Berdahl		BPA-PBL	503. 230-4502	<a href="mailto:rmberdahl@bpa.gov">rmberdahl@bpa.gov</a>
3	Kenneth Dillon	✓	PGE-T	503. 464-7400	<a href="mailto:kenny.dillon@pgn.com">kenny.dillon@pgn.com</a>
4	Marv Landauer	✓	BPA	503. 230-4105	<a href="mailto:mjlandauer@bpa.org">mjlandauer@bpa.org</a>
5	Chris Reese	✓	PSE	425.462-3055	<a href="mailto:chris.reese@pse.com">chris.reese@pse.com</a>
6	Linda Finley		Snohomish PUD	425. 783-1990	<a href="mailto:lafinley@snopud.com">lafinley@snopud.com</a>
7	Jim Eden	✓	PGE-PS	503. 464-7031	<a href="mailto:jim.eden@pgn.com">jim.eden@pgn.com</a>
8	Bill Mittelstadt		BPA-Consulting	360. 619-6672	<a href="mailto:wmittelstadt@bpa.gov">wmittelstadt@bpa.gov</a>
9	Dana Reedy		NWPP	503. 464-2806	<a href="mailto:dana@nwpp.org">dana@nwpp.org</a>
10					
11	<i>Via phone:</i>				
12	Gordon Dobson-Mack	✓	Powerex		
13	John Martinsen	✓	Snohomish PUD		
14	Hugh Nguyen		PSE		
15	Cath Mathews	✓	NWE		
16	Phil Carver		Oregon Offices		
17	Franklin Lu	✓	SCL		
18	Dan Pfeiffer		Idaho Offices		
19	Stefan Brown		Oregon Offices		
20	Rod Lenfest		Sea Breeze Pacific		



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*Attendance List*

	<i>Name</i>	<i>Voting Member</i>	<i>Company</i>	<i>Phone Number</i>	<i>Email</i>
21	Tuan Tran	✓	Tacoma Power		
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# Regional Transmission Adequacy Guidelines Proposal for N-2 Load Service

January 17, 2006  
PDX Conference Center

Transmission Adequacy Steering Committee and Technical  
Workgroup Joint Meeting

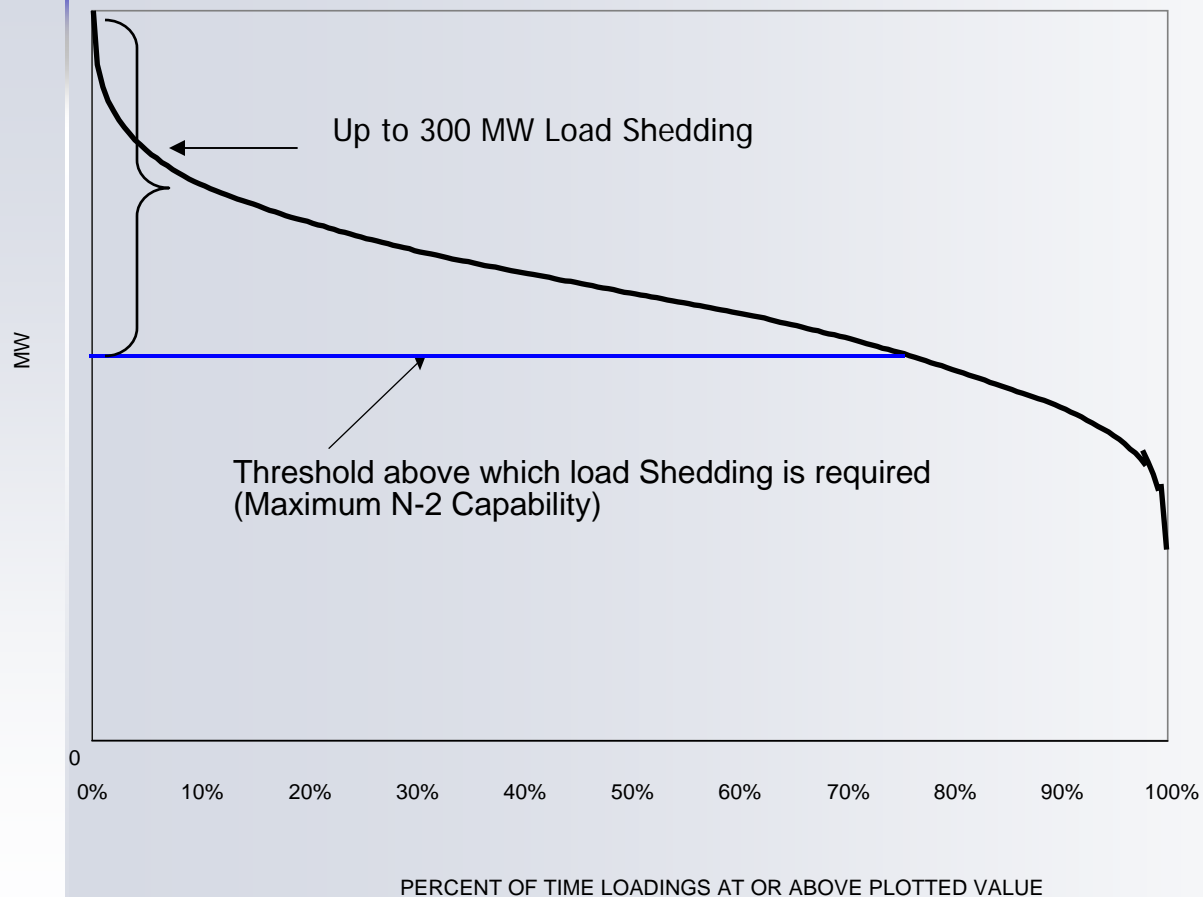
# Objective

- Have uniform guidelines to plan the regional system as defined in the NWPP footprint
- Provide guidance on when and where to make cost-effective investments to meet existing deterministic NERC/WECC standards.
  - E.g., N-2 (Olympic Peninsula) and N-1-1 (Puget Sound, Redmond) for load service areas
- Expected results: One or more documents to supplement existing WECC, NERC, and utility reliability criteria

# Draft Proposal for N-2

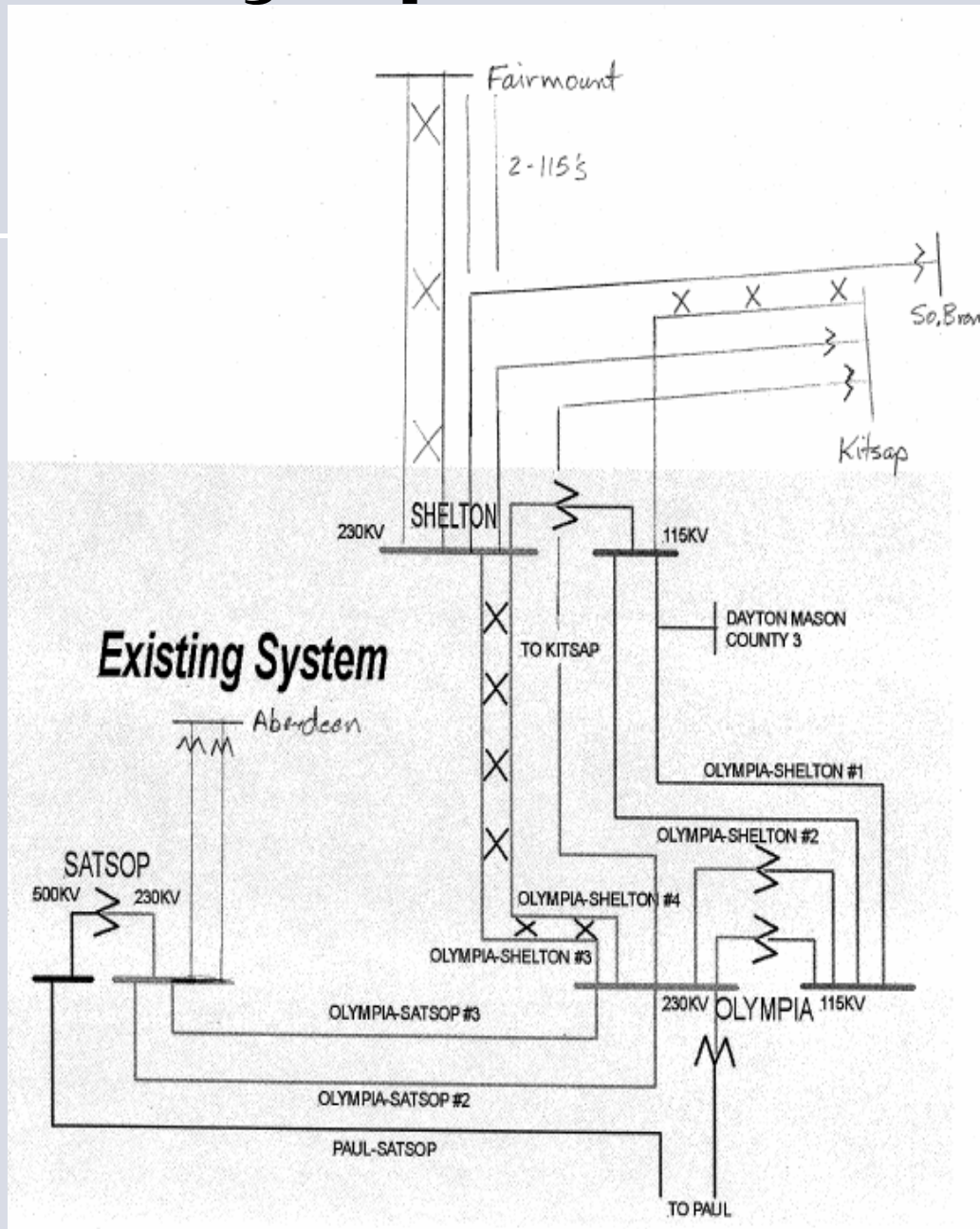
- 500 kV and 345 kV Main Grid is covered by WECC/NERC → Meet N-2 outage for 1 in 2 load level
- For 230 kV and below
  - Transmission adequacy for service to load areas under N-2 (Breaker Failure and Common Tower):
    - No cascading beyond the **local** load area;
    - Planned and controlled load shedding up to 300 MW **at Peak**;
    - **Study recommended if load tripping is above 100 MW or 50% of the total local area load**
      - **Consider cost for the solution**
      - **Apply prudent utility practice**
    - Controlled load shedding above 300 MW will trigger a Societal Benefit Vs Cost of Project analysis;

# Illustration (load center X)

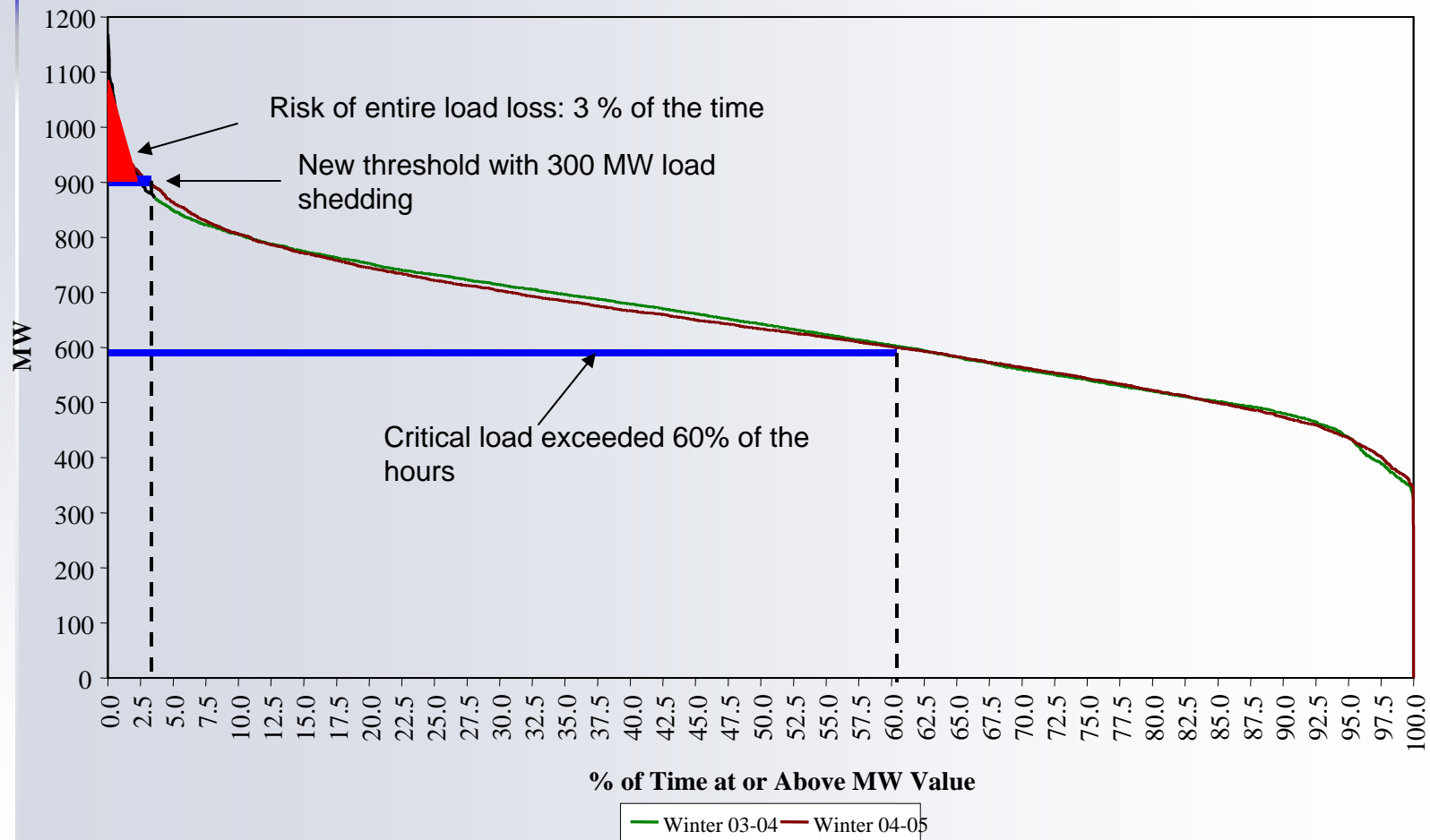


- **Load shedding is allowed Up to 300 MW:** Do nothing or cost effective fix
- **>100 MW or 50% of total load:** Identify solution and cost associated
- **> 300 MW or 50% of total load:** Load shedding with Cost/Benefit Analysis
- Assumes load forecast of 1 in 2 years

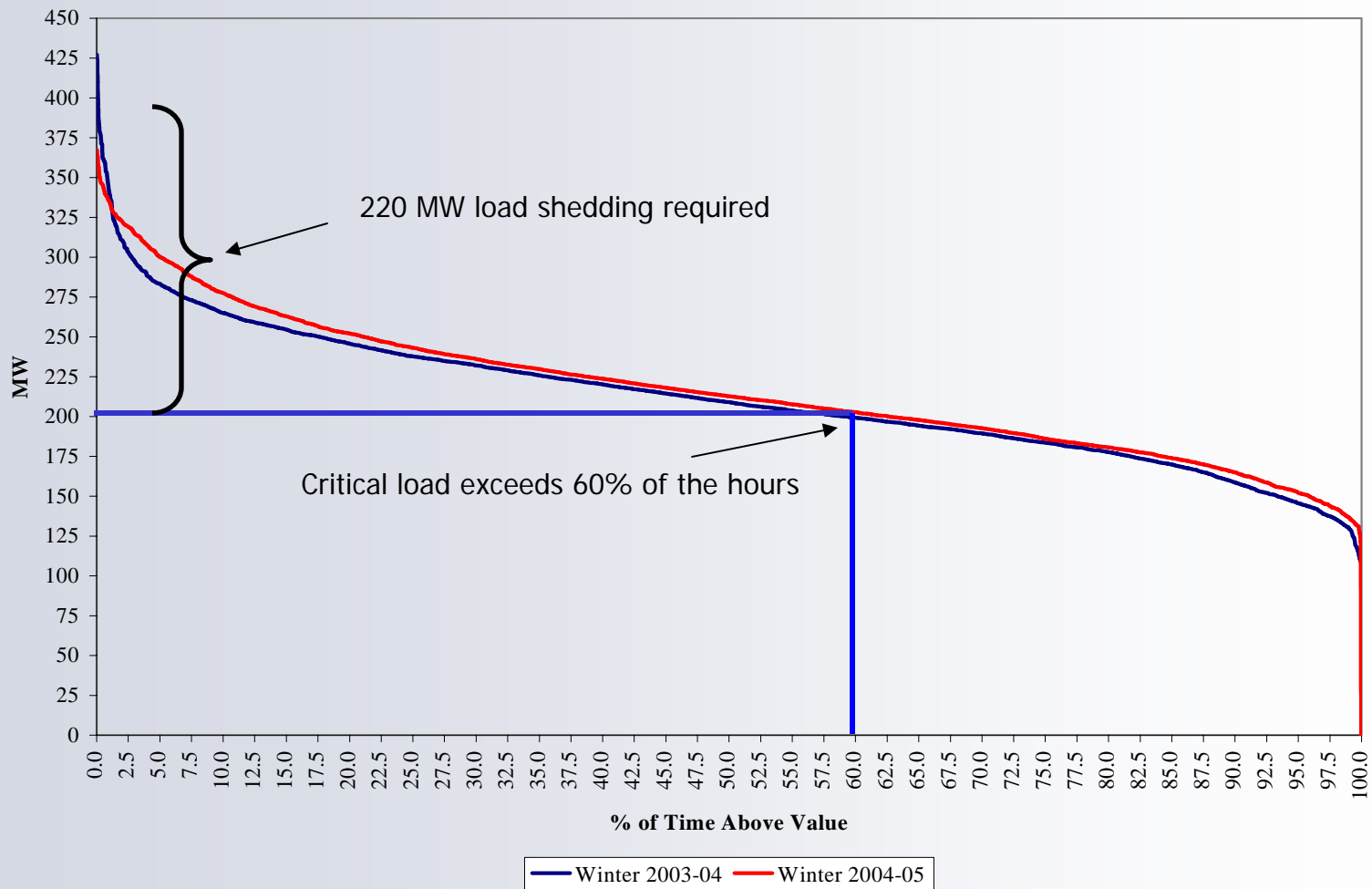
# Ex. 1: Olympic Peninsula



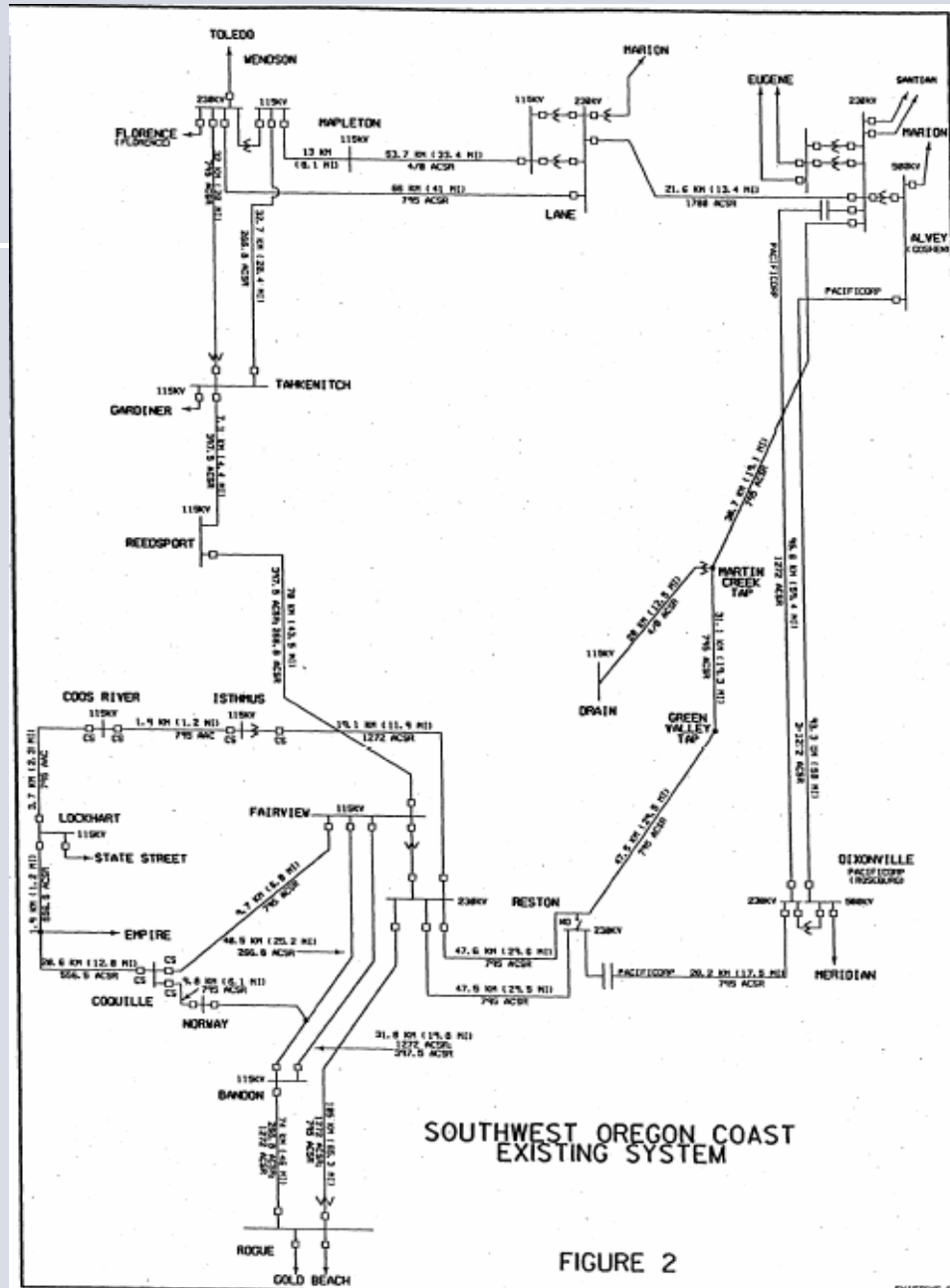
# Olympic Peninsula Winter (Nov. – Feb.)



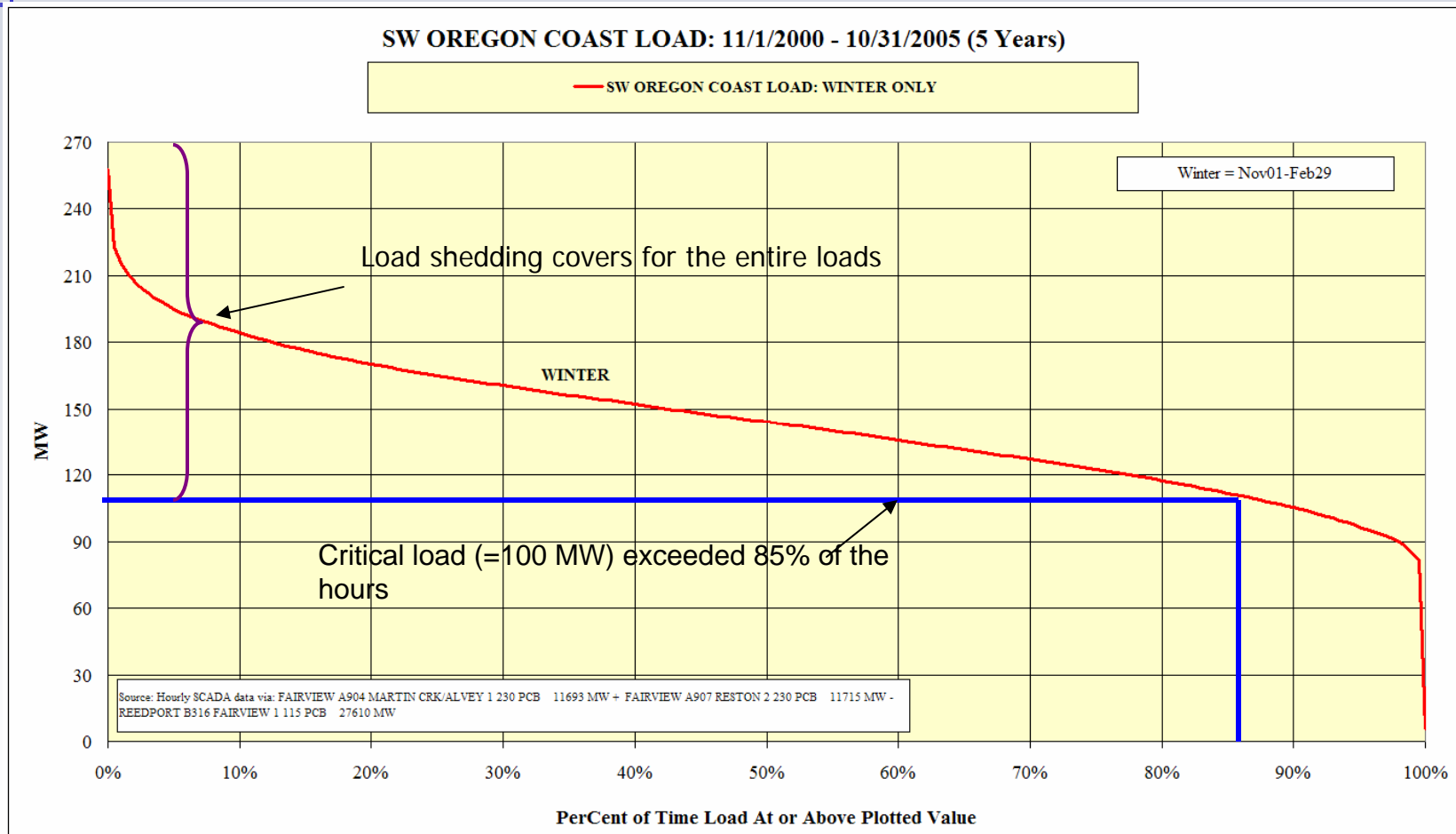
# North of Shelton Winter (Oct. – Feb.)



# Ex. 2: Southwest Oregon Coast



# S Oregon Coast



# Examples of Load Service Areas in NWPP

Load Service Area	Total Load	Load Shedding Amount
Aberdeen Area	290	145
Chehalis	165	165
Lower Valley Power & Light	150	50
Okanogan	200	100
Olympic Peninsula	1170	<b>600</b>
Southern Oregon	1400	<b>150</b>
Bend/Redmond	400	<b>250</b>
N of Shelton	460	230
South Oregon Coast	300	200

1. Total load based on forecasted Winter Load
2. Load shedding amount is approximate based on preliminary studies

# Next Steps

- Dec. 2005 – Jan. 5 2006
  - Refine proposal
  - Add examples to test the viability of the proposal
  - Brief the TASC members
- Jan. 2006
  - Approval for a wider audience review
- Jan. 2006
  - Continue to work on the remaining issues to be addressed