



Integrated Resource Planning (IRP)

In the early 1990s, the Idaho and Oregon public utilities commissions began requiring utilities to file an Integrated Resource Plan (IRP).

IRP Goals:

- Identify sufficient resources to reliably serve the growing demand for energy within Idaho Power's service area throughout the 20-year planning period
- Give equal and balanced treatment to both supply-side resources and demand-side measures
- Ensure the portfolio of selected resources balances cost, risk, and environmental concerns
- Involve the public in the planning process in a meaningful way



IRP Advisory Council Offers Opportunity for Public Input

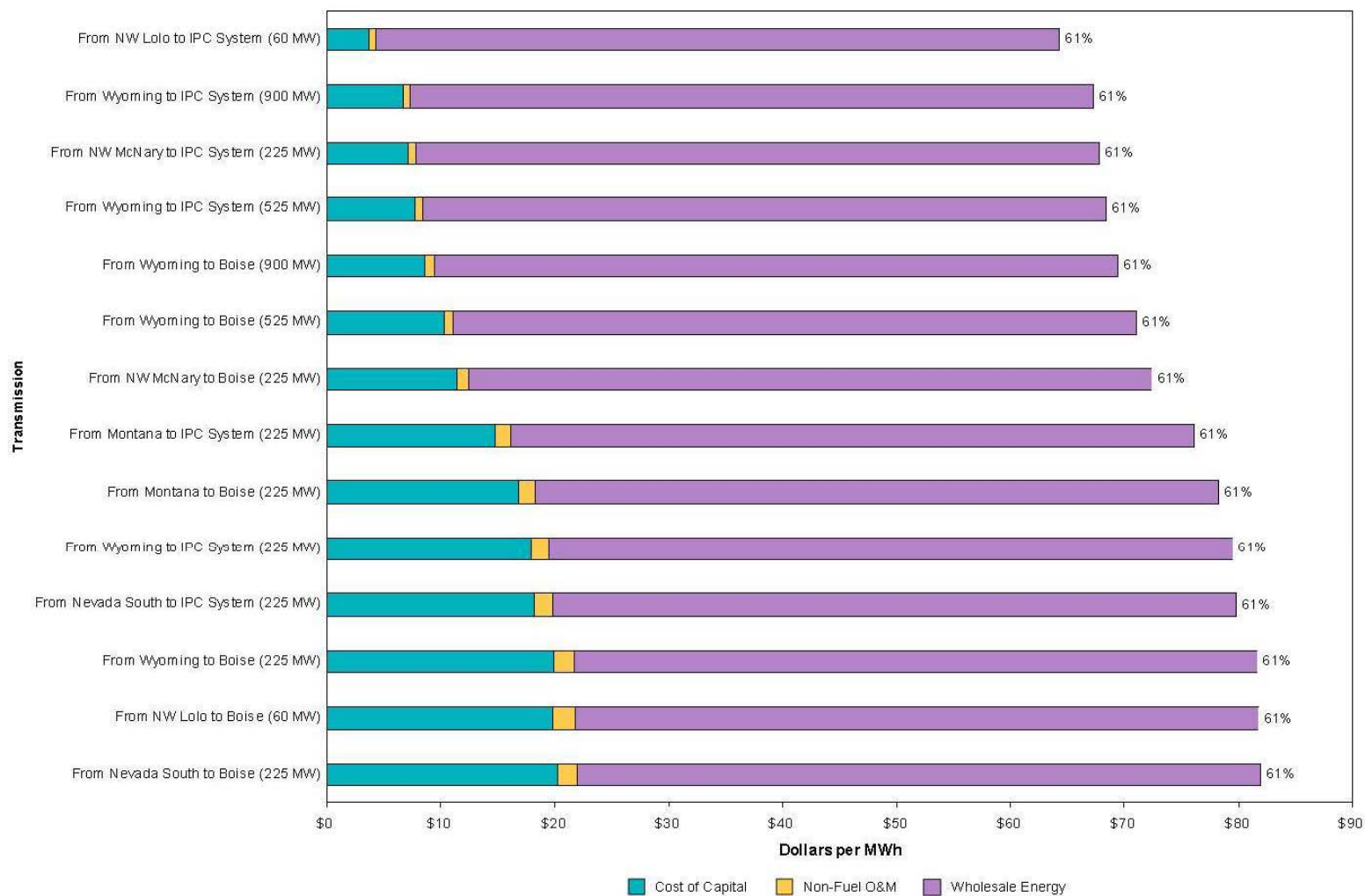
- Beginning with the 2004 IRP, Idaho Power formed the Integrated Resource Plan Advisory Council (IRPAC) to increase public participation in the planning process
- IRP Advisory Council members represent a broad range of customer, governmental, environmental and regulatory interests
- The IRP Advisory Council meets monthly during the preparation of the IRP



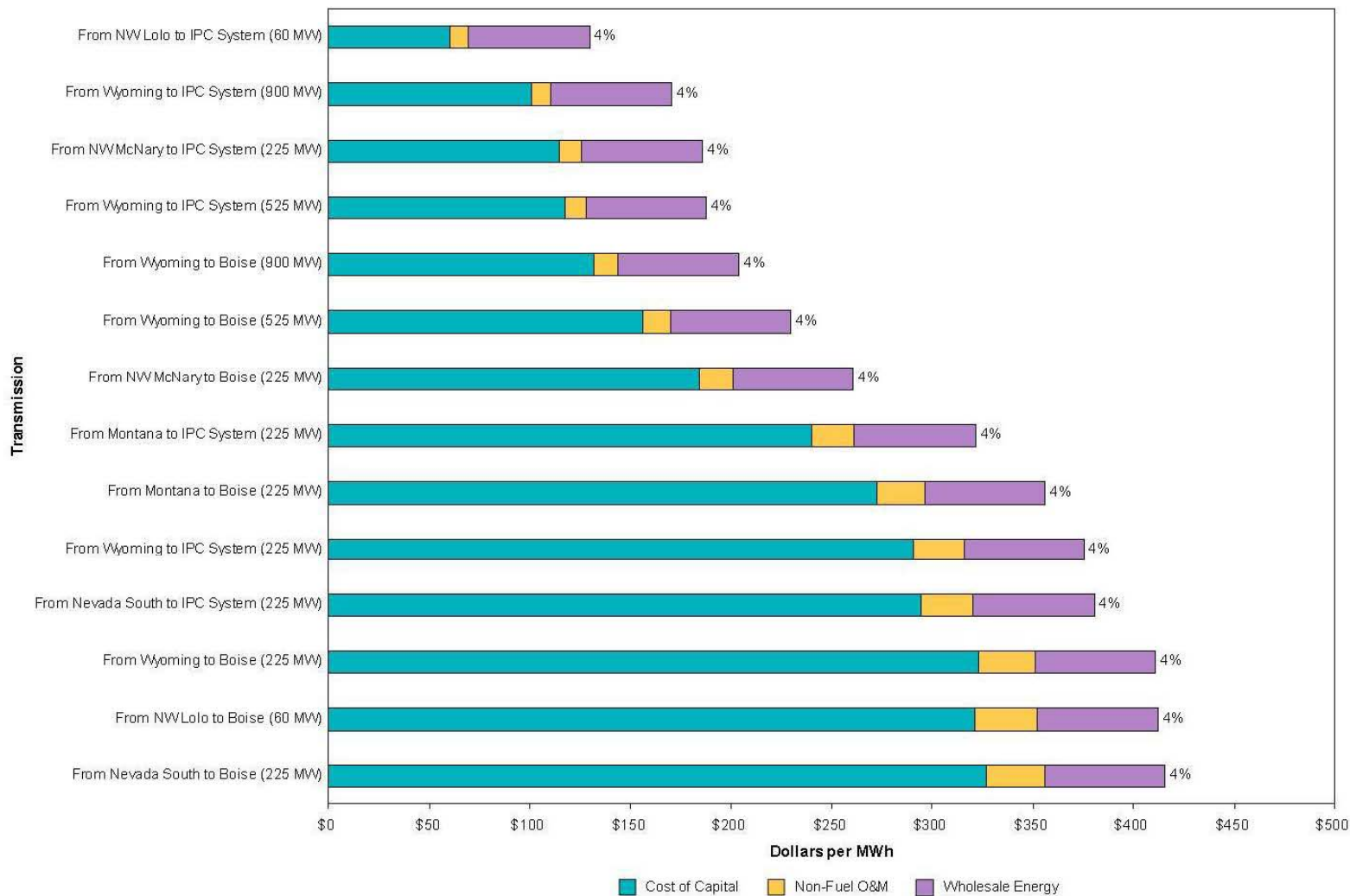
B2H History in IRP

- In its acceptance of Idaho Power's 2004 IRP, the Idaho PUC asked Idaho Power to evaluate additional transmission options in the 2006 IRP
- Transmission options analyzed in the 2006 IRP included:
 - McNary to Boise
 - Lolo to Oxbow
 - Wyoming to Boise
 - Montana to Boise
 - Nevada to Boise

Levelized Cost (Baseload)



Levelized Cost (Peaking Service)



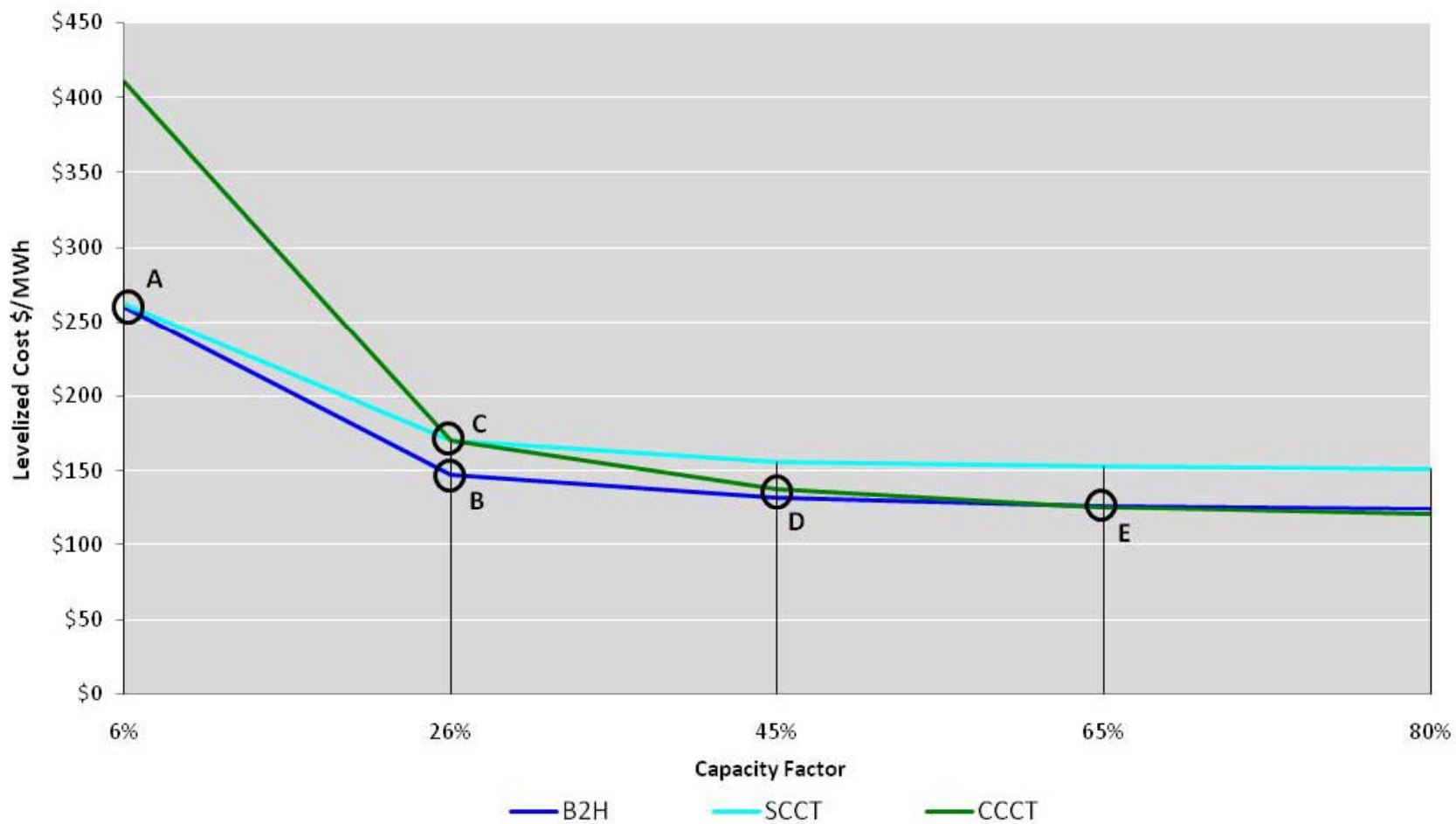


IRP Cost Comparisons

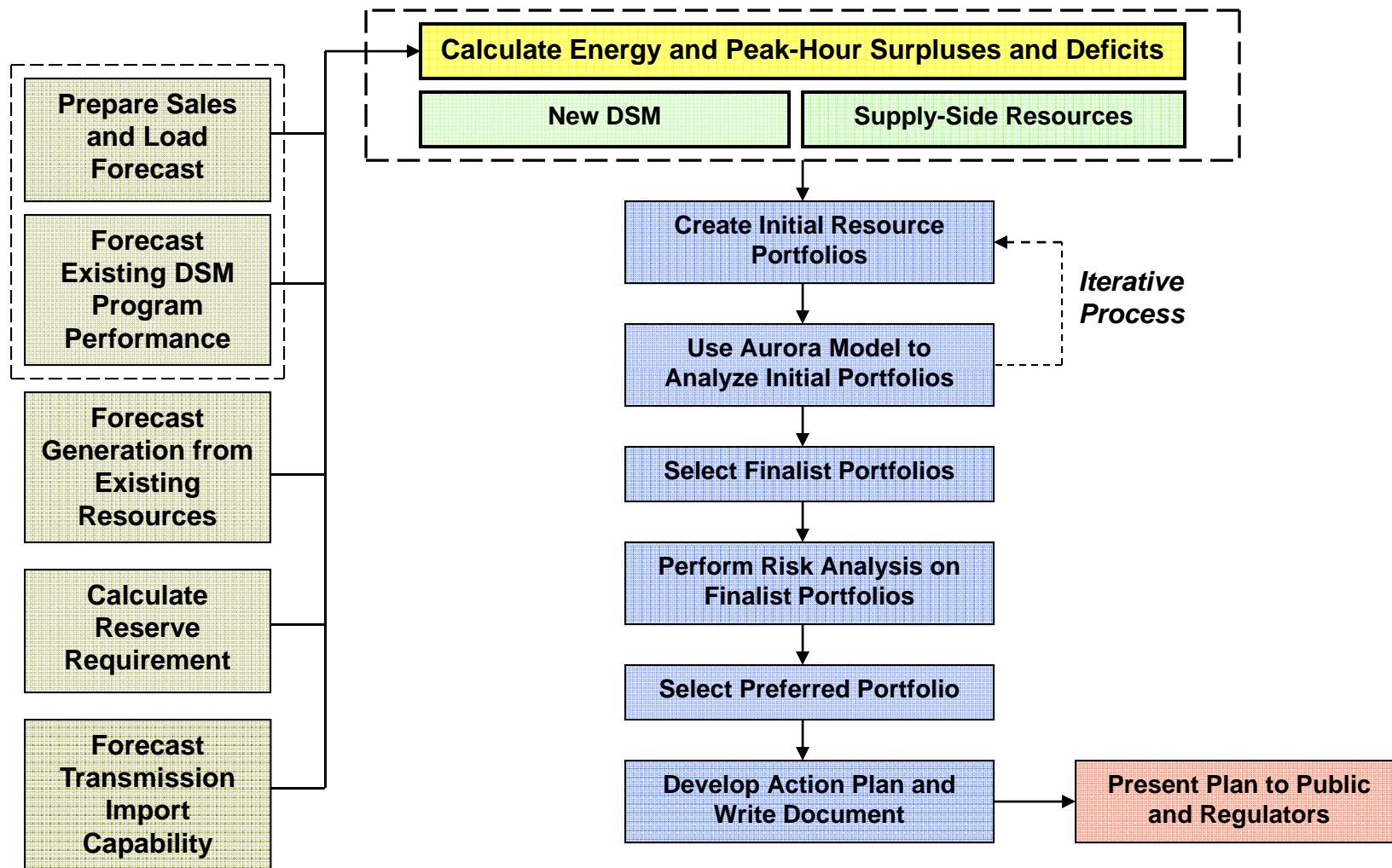
Capital Cost (\$/kW)	2006 IRP	2009 IRP
CCCT	\$693	\$1,293
B2H	\$546	\$706

30-Year Levelized Cost (\$/MWh)	2006 IRP	2009 IRP
CCCT	\$78	\$125
B2H	\$72	\$125

Current Levelized Cost Comparison



IRP Process Flowchart



Average Energy Load and Resource Balance

Average Energy	2015											
Load and Resource Balance	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Load Forecast (70th%) - May 2009	(2,239)	(2,068)	(1,824)	(1,810)	(2,002)	(2,435)	(2,763)	(2,546)	(2,101)	(1,791)	(1,965)	(2,307)
Existing DSM	67	67	68	70	78	95	96	93	74	68	68	67
Net Load Forecast (70th%) w/DSM	(2,171)	(2,001)	(1,756)	(1,740)	(1,925)	(2,340)	(2,668)	(2,453)	(2,027)	(1,723)	(1,897)	(2,239)
Existing Resources												
Coal	938	938	868	777	728	933	938	938	938	937	938	938
Hydro (70th%) - HCC	654	537	598	694	837	660	460	358	409	395	364	474
Hydro (70th%) - Other	214	300	252	240	327	338	246	242	233	216	202	206
Shoshone Falls Upgrade	6	31	14	1	19	22	0	0	0	0	0	3
Total Hydro (70th%)	874	869	864	935	1,183	1,020	706	599	642	611	567	683
CSPP (including wind)	101	120	130	148	185	195	181	174	172	146	120	125
Power Purchase Agreements												
Elkhorn Valley Wind	34	33	34	35	30	37	37	33	29	35	32	44
Raft River Geothermal	10	10	10	10	10	10	10	10	10	10	10	10
PPL Montana - Jefferson (83 MW)	0	0	0	0	0	0	0	0	0	0	0	0
East Side Purchase (50 MW)	0	0	0	0	0	0	0	0	0	0	0	0
Mead Purchase	0	0	0	0	0	0	0	0	0	0	0	0
Total Power Purchase Agreements	44	43	44	45	40	47	47	43	39	45	42	54
Firm Pacific NW Import Capability (Actuals Through Sept 2010)	202	379	446	290	335	222	103	172	167	214	354	297
Langley Gulch	251	251	251	251	251	251	251	251	251	251	251	251
Boardman to Hemingway	0	0	0	0	0	225	225	225	225	225	225	225
Gas Peakers	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,411	2,601	2,603	2,445	2,721	2,893	2,452	2,403	2,434	2,429	2,497	2,573
Monthly Surplus/Deficit	239	600	847	706	796	554	(216)	(50)	407	706	600	334
2009 IRP DSM												
Industrial	4	4	4	4	4	4	4	4	4	4	4	4
Commercial	1	1	1	1	1	1	1	1	1	1	1	1
Residential	2	2	2	2	2	6	6	6	2	2	2	2
Total New DSM Average Energy	13	13	13	13	13	12	12	12	13	13	13	13
Monthly Surplus/Deficit w/New DSM	252	613	860	719	809	566	(204)	(38)	420	719	613	346

Peak-Hour Load and Resource Balance

Peak-Hour	2015											
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Load and Resource Balance												
Load Forecast (95th%) - May 2009	(2,895)	(2,715)	(2,436)	(2,166)	(3,123)	(3,755)	(3,962)	(3,563)	(3,296)	(2,335)	(2,618)	(3,113)
Existing DSM	67	67	68	70	78	172	175	163	74	68	68	67
Peak-Hour Load Forecast	(2,827)	(2,647)	(2,368)	(2,096)	(3,045)	(3,583)	(3,787)	(3,400)	(3,222)	(2,266)	(2,550)	(3,046)
Existing Resources												
Coal	982	982	816	816	761	982	982	982	982	982	982	982
Hydro (90th%) - HCC	1,079	847	555	690	1,199	1,115	1,035	945	1,035	765	600	786
Hydro (90th%) - Other	197	199	190	203	295	307	241	230	207	202	191	196
Shoshone Falls Upgrade	2	2	0	0	14	17	0	0	0	0	0	1
Total Hydro	1,278	1,048	745	893	1,508	1,440	1,276	1,175	1,242	968	791	982
CSPP (including wind)	49	50	55	81	127	137	141	136	119	87	62	57
Power Purchase Agreements												
Elkhorn Valley Wind	5	5	5	5	5	5	5	5	5	5	5	5
Raft River Geothermal	10	10	10	10	10	10	10	10	10	10	10	10
PPL Montana - Jefferson (83 MW)	0	0	0	0	0	0	0	0	0	0	0	0
East Side Purchase (50 MW)	0	0	0	0	0	0	0	0	0	0	0	0
Mead Purchase	0	0	0	0	0	0	0	0	0	0	0	0
Total Power Purchase Agreements	15	15	15	15	15	15	15	15	15	15	15	15
Firm Pacific NW Import Capability (Actuals Through Sept 2010)	202	379	446	290	335	222	103	172	167	214	354	297
Langley Gulch	300	300	300	300	300	300	300	300	300	300	300	300
Boardman to Hemingway	0	0	0	0	0	225	225	225	225	225	225	225
Gas Peakers	416	416	416	416	416	416	416	416	416	416	416	416
Subtotal	3,242	3,190	2,793	2,811	3,462	3,737	3,458	3,421	3,466	3,207	3,145	3,274
Monthly Surplus/Deficit	0	0	0	0	0	0	(329)	0	0	0	0	0
2009 IRP DSM												
AC Cool Credit						5	5	5				
Commercial (ENERNOC)						57	57	57				
Irrigation Peak Rewards						228	226	(24)				
Energy Efficiency Peak Reduction						12	12	12				
Total New DSM Peak Reduction	0	0	0	0	0	302	300	49	0	0	0	0
Monthly Surplus/Deficit w/New DSM	0	0	0	0	0	0	(30)	0	0	0	0	0

