

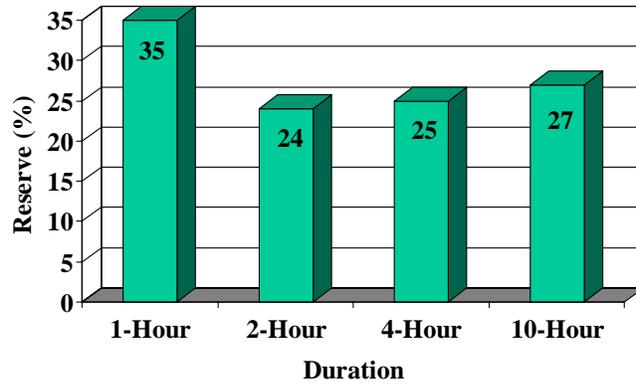
Prototype Methodology for a Regional Capacity Assessment

Resource Adequacy Technical Committee
March 9, 2006
Portland, OR

Regional Capacity Assessment

	1-Hour	2-Hour	4-Hour	10-Hour
Hydro ('37)	26,850	21,131	20,541	18,686
Non-hydro	13,760	13,760	13,760	13,760
Uncommitted	0	0	0	0
Firm Imports	-1,218	-1,218	-1,218	-1,218
Spot Imports	0	0	0	0
Total Resource	39,392	33,673	33,083	31,228
Load (Avg)	25,633	25,506	24,847	22,691
Balance	13,759	8,168	8,236	8,537
Reserve	35%	24%	25%	27%
Load ('89)	34,533	34,361	33,470	30,555
Balance	4,859	-688	-387	673
Reserve	12%	-2%	-1%	2%

Reserve as a function of Duration

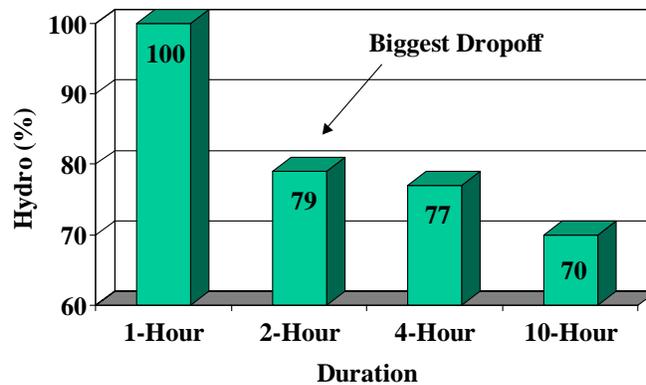


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Hydro as a function of Duration

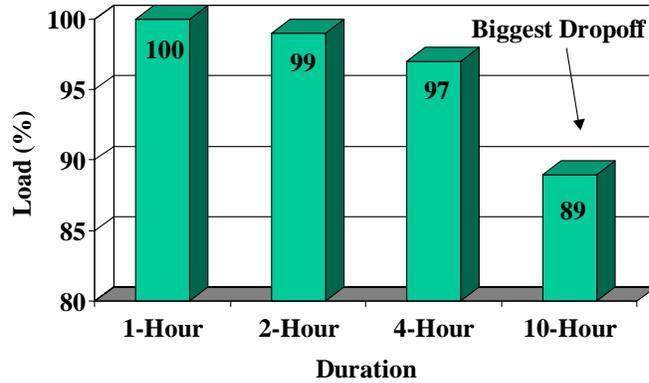


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Load as a function of Duration

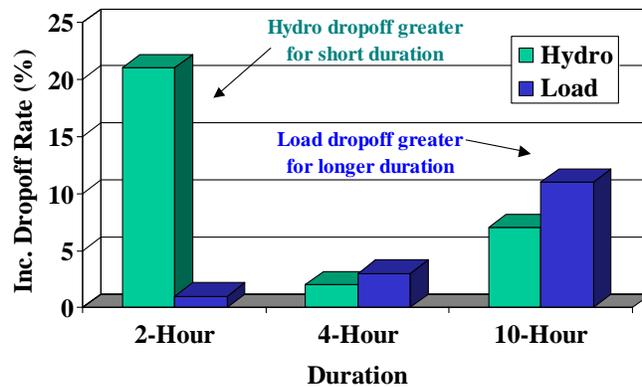


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Dropoff as a function of Duration



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Observations

- Single hour reserve is misleading for NW
- Need about 25% reserve to cover a cold snap
- Shorter durations – hydro drops off faster than load so reserve goes down
- Longer durations – load drops off faster than hydro so reserve goes back up
- 4-hour reserve may be good candidate

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Regional Capacity Assessment (With spot market assumptions)

	1-Hour	2-Hour	4-Hour	10-Hour
Hydro ('37)	26,850	21,131	20,541	18,686
Non-hydro	13,760	13,760	13,760	13,760
Uncommitted	0	0	0	0
Firm Imports	-1,218	-1,218	-1,218	-1,218
Spot Imports	3,000	3,000	2,000	1,500
Total Resource	42,392	36,673	35,083	32,728
Load (Avg)	25,633	25,506	24,847	22,691
Balance	16,759	11,168	10,236	10,037
Reserve	40%	30%	29%	31%
Load ('89)	34,533	34,361	33,470	30,555
Balance	7,859	2,312	1,613	2,173
Reserve	19%	6%	5%	7%

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