



CPPP Stakeholder Meeting

Data and Assumptions

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Data and Assumptions

Loadflow Assumptions

- Load Forecast
- Generation Resource Plan
- Transmission Configuration

Data

- 7 Cases
 - 4 Near-term (years 1-5)
 - 3 Long-term (years 6-10)



Load Forecast

Annual Delivery Point Forecast

- Coincident with TVA's system peak
- Medium rate of occurrence based on normal weather patterns (50 / 50)
- Normal economic assumptions



Generation Resource Plan

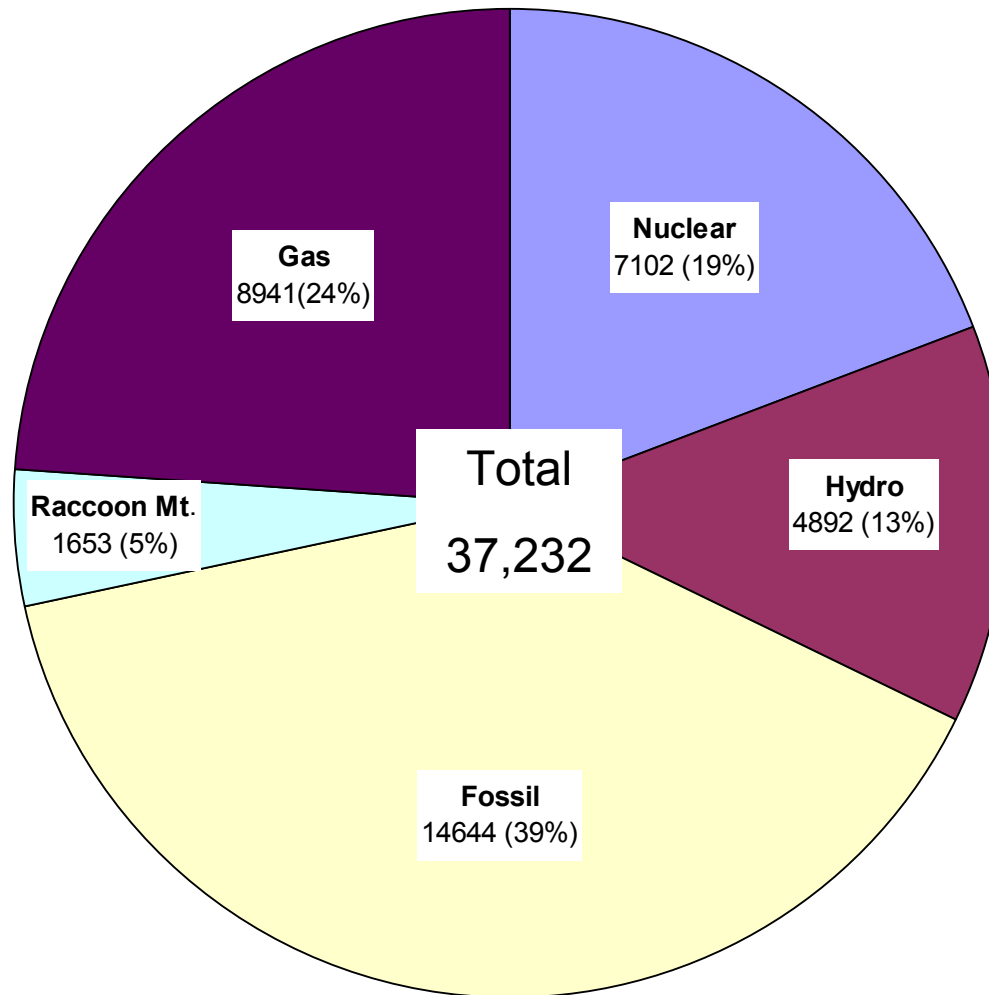
Generation Dispatch

- Sort resources in TVA's long-range resource plan in economic order based on dispatch cost
 - Nuclear
 - Hydro
 - Fossil
 - Raccoon Mt.
 - Gas
- Commit resources until system demand is reached
 - Load
 - System Losses
 - Net Interchange



Generation Dispatch Example

S12V - Net Generation Dispatch (MW)





Transmission Configuration

Transmission System Assumptions

- All facilities are operated in their normal configuration
 - Facilities are in-service
 - Alternate source schemes
 - Normally opened switches
- All transmission projects are completed on time



Internal Reliability Loadflow Cases

Seasons

- Winter Peak (J)
- Spring Peak (Z)
- Shoulder (H)
- Summer Peak (S)
- Fall Peak (F)
- Light Load (L)

Naming Convention

Season*Year*Case Vintage (e.g. Z10V)

– Spring Peak*2010*V-vintage



Internal Reliability Loadflow Cases

TVA's 2009 Transmission Expansion Plan

- Based on analysis of 7 internal loadflow cases
 - Z10V
 - S12V
 - S12V_CTsON
 - J13V
 - S15V
 - J18V
 - S18V



Case Summaries

BTP 2009 CASES: V-series (9/22/08)

INTERNAL RELIABILITY CASES	2008 LTSG External	Ratings Ambient Temp (°C)	Load Forecast (MW)	Net Interchange (MW)	Nuclear (MW)	Hydro (MW)	Fossil (MW)	Raccoon Mt (MW)	Gas (MW)
Z10V	LTSG10Z	30	26644	555	6952 25%	4832 18%	14946 54%	826 3%	97 0%
S12V	LTSG12S	40	35971	583	7102 19%	4892 13%	14644 39%	1653 5%	8941 24%
S12V_CTsOn	LTSG12S	40	35971	583	7102 19%	4892 13%	13643 37%	1239 3%	10381 28%
J13V	LTSG12W	0	34762	464	8410 23%	4870 14%	15069 41%	1653 5%	5941 17%
S15V	LTSG15S	40	38037	585	8252 21%	5186 14%	14714 37%	1653 4%	9564 24%
J18V	LTSG15W	0	36214	462	8410 22%	5207 14%	15098 41%	1653 4%	7135 19%
S18V	LTSG19S	40	39356	592	9369 23%	5252 13%	14667 35%	1653 4%	9852 25%



Data and Assumptions

Data

- Loadflow base cases available upon request and completion of non-disclosure agreement
- Contact - Ian Grant, TVA Planning Coordinator
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Loadflow Results

- Presented during February 2009 CPPP Meeting



Data and Assumptions

Questions?