

2010 Summer Capacity Presentation

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Overview

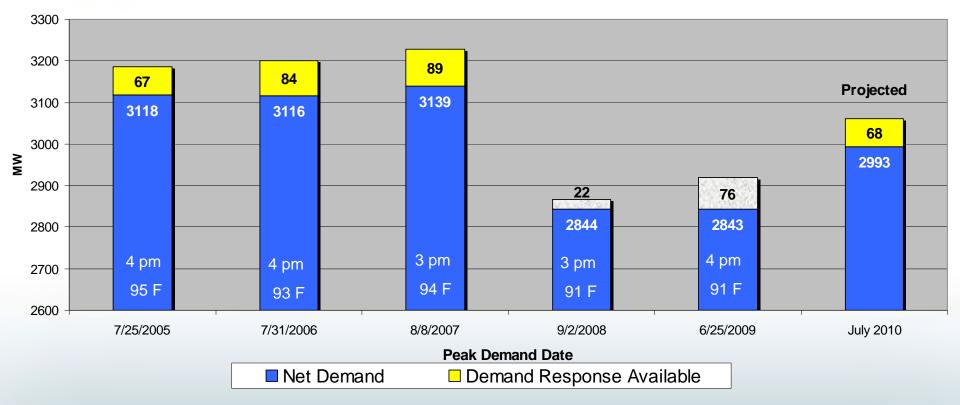
- Peak Demand
- IPL Generation
- Planning Reserve Margins
- Generation Availability
- Power Delivery Improvements
- DOE Stimulus Project
- The Future



Summer 2010 Preparation: HSS Unit 5 Condensor Cleaning



IPL Summer Peaks and Demand Response



Notes:1) In 2008 and 2009, the peak equals the net demand, since we did not need to call upon our available demand response resources

2) Summer defined as June, July, August, and September

Demand Response Options

Summer Demand Impacts (MW)

Rider		2009	2010
14	Real Time Interruptible	12	0
15	Customer-owned generation	36	40.3
17	Interruptible with notice	2	3.4
ACLM	ACLM Demand Response	26	24.6
SS Special	Low load factor Interruptible	4.8	5.0
	Total	80.8	73.3
	Total (recognized by MISO)	76	68.3

Note: SS Special Agreements are not recognized by MISO as Load Modifying Resources

IPL Generation

(Summer Ratings)

Fuel	MW	
Coal	2,651	Baseload, Intermediate & Peaking
Oil	208	Peaking
Gas	316	Peaking
Dual	4 1 4	
(oil/gas)	164	Peaking
Diesel	14	Peaking
100	3,353	元·2000年6月



Renewable Resources





- Renewable incentives for small-scale projects
- Expansion of net metering rider
- Feed-in Tariff for largerscale renewables at customer locations



2010 Planning Reserve Requirements

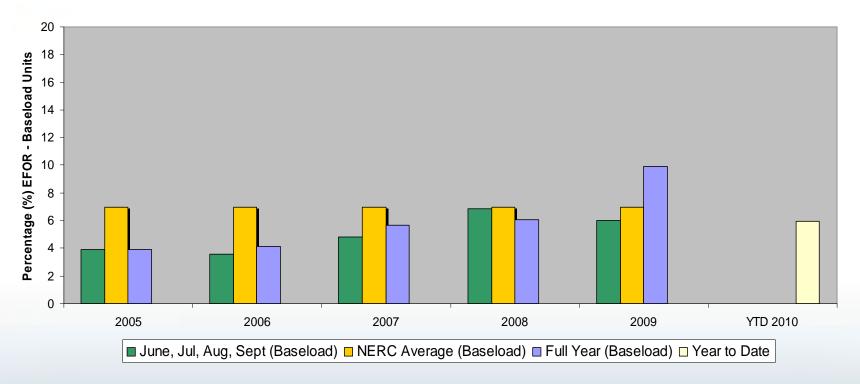
- MISO establishes Planning Reserve Requirements
- Reserve Margin (%) after accounting for MISO coincident peak is 11.94%
- Resources credited at Unforced Capacity levels
 - After taking into account unit specific, historic unavailability
- Planning Reserve Margin UCAP (%) (PRM_{UCAP})
 - Planning Reserve Margin corrected for MISO system average unit unavailability
 - 4.50% = UCAP Reserve Margin
- UCAP Planning Reserve Requirement (MW)
 - Net Demand x 1.045



Planning Reserve Requirements (MW)

	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	Sept
UCAP Planning Reserve Requirement	3,011	3,127	3,069	2,772
IPL Resources (MISO UCAP Ratings)	3,039	3,039	3,039	3,039
IPL Position Prior to Accounting for Capacity Sales & Purchases	+27	-89	-31	+267
IPL Net Sales (-) & Purchases (+)	0	+90	+90	0
Current IPL Position	27	1	59	267





EFOR is an industry measure that represents the effect on unit reliability due to unit forced outages and/or unplanned derates.

Latest available NERC 5 yr average EFOR of 6.98% is used



Peaking Unit Availability

- Mild weather and market dynamics significantly decreased the need for peaking units for dispatch in 2009
- Market value of capacity was extremely low
- Cost of replacement capacity was down 90% to 95% from historical levels
- Demand lower
 - Decreases peaker dispatch
 - Decreases capacity costs
 - Business decision to
 - Not repair HSS GT3
 - Extend outage on HSS GT4

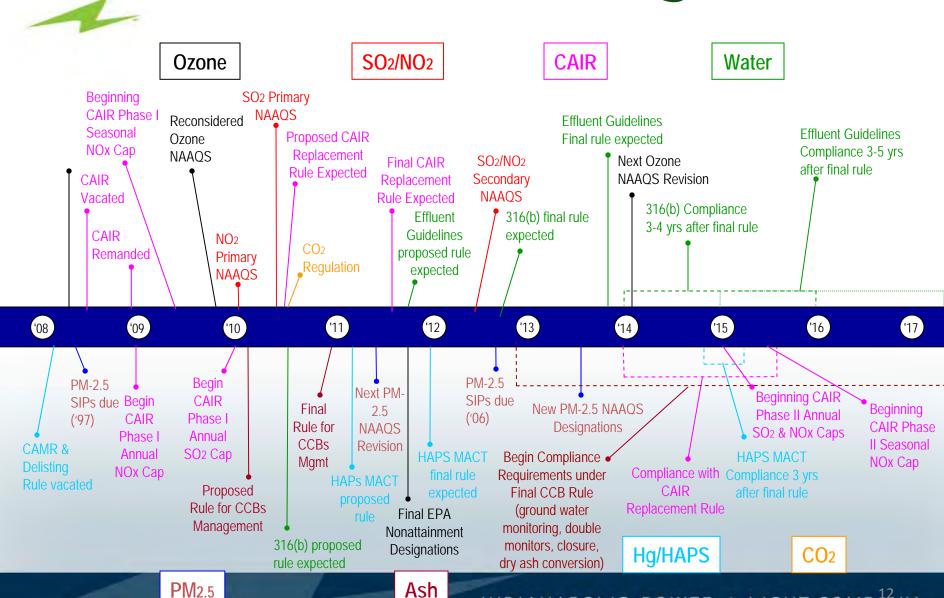


Big 5 Long-Term Maintenance Plan

- ➤ 10-year plan to address current and future reliability issues with 5 Large Coal Units totaling 2,179 MW of low cost scrubbed generation
 - ➤ CapEx \$28M (11 year plan)
 - ➤ O&M \$27M
- IPL's Big5 is the four Petersburg Units and Harding Street Unit 7
- Addresses major components that are approaching normal design life
- Correct known reliability problems and get in front of developing reliability issues
- Increases predictive and proactive maintenance



Environmental Regulation



Power Delivery Projects



- **➤**Bridgeport Substation
- ➤ Cumberland / Indian Creek Line
- West Transformer replacement
- ➤ Petersburg Thompson upgrade







DSM ProgramsCore



Core offerings (as specified by the IURC) that are being developed and implemented:

- > Residential Prescriptive Lighting Program
- > Residential On-Site Audit with Direct Install Program
- >Low & Moderate Income Weatherization
- ➤ Energy Efficient Schools—Kits and Audits
- >Commercial and Industrial Prescriptive Program



DSM Programs Core Plus

- Residential
 - ACLM
 - Energy Assessment
 - New Construction Energy Star Plus
 - 2nd Refrigerator Pickup and Recycling
 - Renewables Incentive



- ACLM
- Custom
- Retro Commissioning Pilot
- New Construction
- Renewables Incentive









DOE Stimulus Overview

- Smart Grid Investment Grant (SGIG)
- Automated Metering Infrastructure (AMI)/ Meter Data Management System (MDMS)
- Distribution Automation Initiatives
- Customer Systems





Electric Vehicles Project "Project Plug-IN"

- Pilot of plug-in electric vehicles and smart grid technology working together
- Leverage partners' manufacturing and technical expertise
- Time based rates for EV charging
- Measure grid impacts
- Small number of vehicles available for the demo
- Between 50 and 100 vehicles added in service territory through late 2010





Home Area Network (HAN)



- Referred to as Home Energy Management System (HEMS) for IPL marketing
- Testing in-home devices with Automated Meter Reading system for energy-only metered customers this summer
- Using customers' broadband connection
- Customers will go on TOU rates for the summer
- Use lessons learned to plan a larger scale HEMS deployment using AMR and AMI in 2011



Sample Customer Tools





Summary

• IPL is well positioned to serve our customers this summer and be in compliance with MISO's planning reserve margin

 We are also taking steps to be prepared for summers to come