



SUMMER 2008 PREPAREDNESS

Duke Energy Indiana

Presentation to Indiana Utility Regulatory Commission

Jim Stanley, President, Duke Energy Indiana

June 3, 2008

OVERVIEW OF PRESENTATION

- Recent Duke Energy Indiana operational accomplishments/challenges
- Summer 2008 capacity and energy needs
- Steps taken to prepare for summer 2008
- Challenges

RECENT DUKE ENERGY INDIANA OPERATIONAL ACCOMPLISHMENTS/CHALLENGES

- Generation:

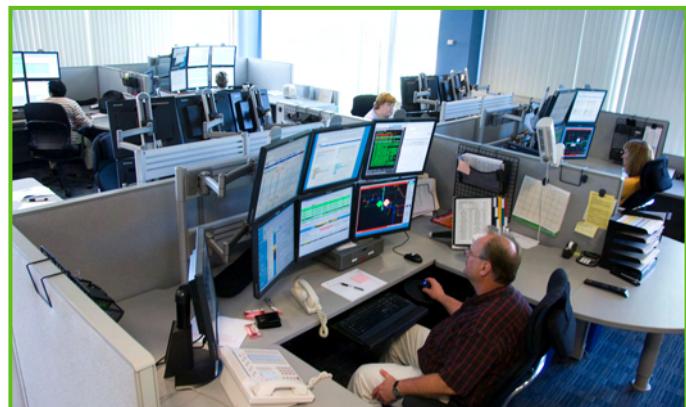
- Highest generation in 2007 out of last five years
- Six of our coal units had continuous runs longer than 100 days
- Several major environmental projects went in-service in 2007 – 2008
- Thermal derates in summer/fall 2007



Gibson Station – April 2008

- Power Delivery:

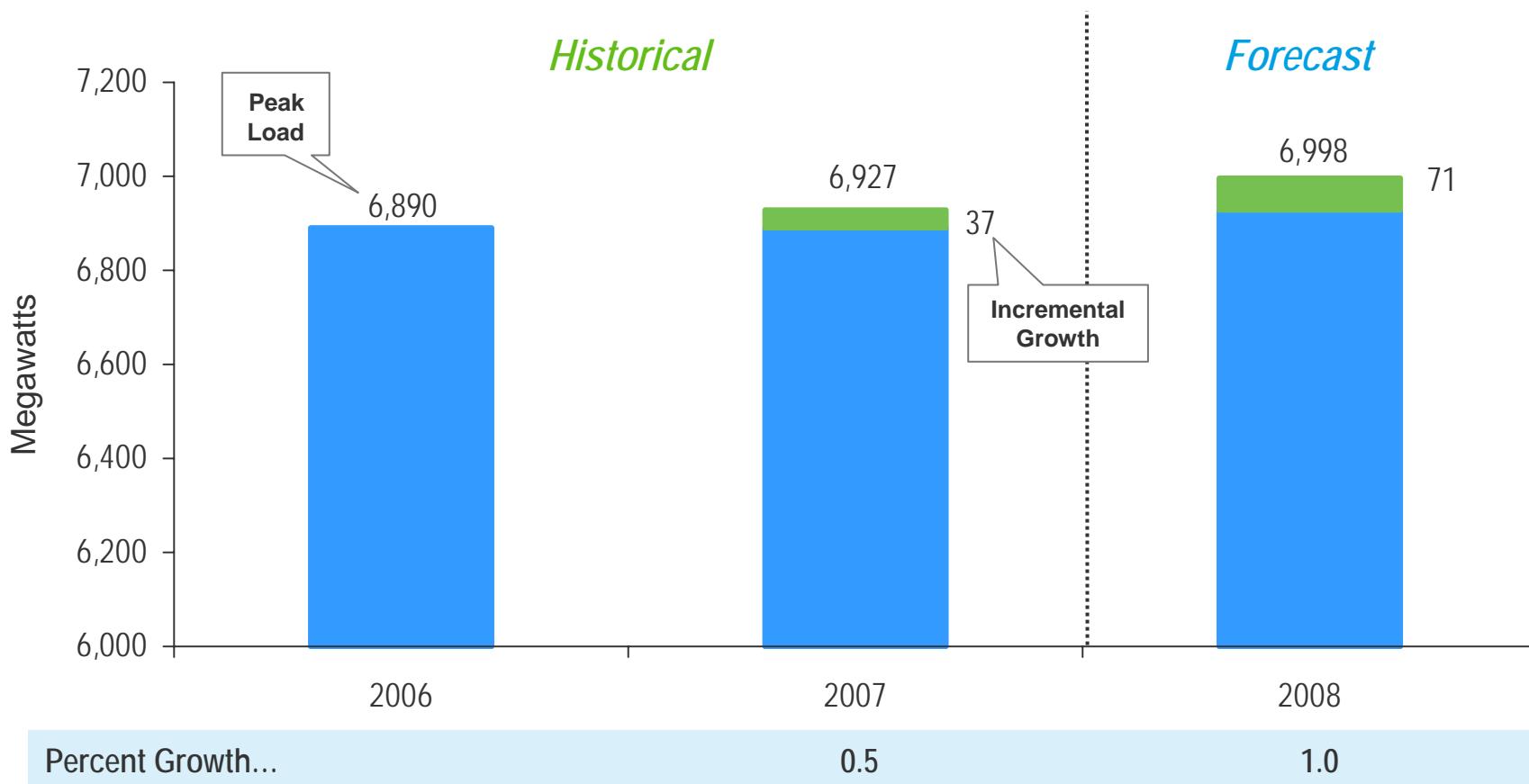
- Power Delivery Work Center completion – Fall 2007
- Storm and Bulk Emergency Plans enhancement
- MISO Ancillary Services Market preparation in anticipation of a June 1, 2008 start date (delayed to September 2008)



Power Delivery Work Center in Plainfield

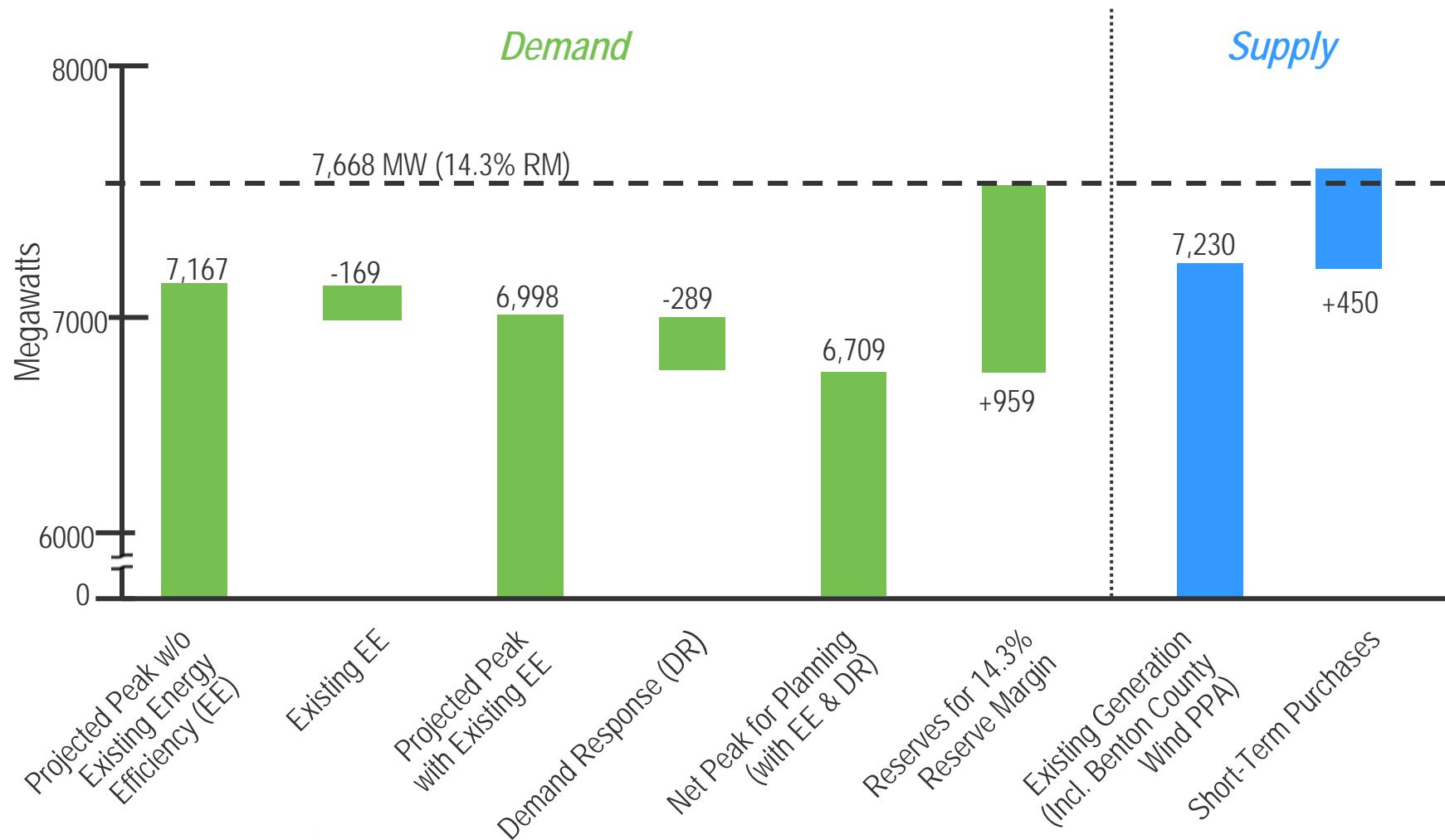
Summer 2008 Capacity and Energy Needs –
DUKE ENERGY INDIANA'S PEAK DEMAND FORECAST

Weather Normalized Peak Load



Summer 2008 Capacity and Energy Needs –

DUKE ENERGY INDIANA'S SUPPLY/DEMAND BALANCE FOR SUMMER 2008



Steps Taken for Summer 2008 – GENERATION SYSTEM



Gallagher Station – January 2008

- Over 70 weeks of maintenance outages were performed this spring
- Generation/equipment availability this summer:
 - All coal generating units
 - All gas-fired generating units after July 1
 - Environmental compliance equipment
 - FGDs and SCRs on all five Gibson units
 - Baghouses on all four Gallagher units
 - Cayuga Unit 2 FGD
- Duke Energy Indiana continues to focus on:
 - Peak availability
 - A program of “availability outages”
 - System-wide and plant-wide contingency

Steps Taken for Summer 2008 –

PURCHASED CAPACITY AND ENERGY

- Duke Energy Indiana's current on-system reserve margin is below the Midwest Planning Reserve Sharing Group requirement of 14.3%
- Short-term purchases from physical capacity will be used to achieve approximately a 14.5% installed reserve margin after known derates
 - 350 MW of purchases for June
 - 450 MW of purchases for July – August
- Financial swaps or financial options may also be used to hedge against wholesale market price volatility
- Duke Energy Indiana will also be purchasing up to 100 MW of wind power energy from the Benton County Wind Farm under a 20-year agreement



Benton County Wind Farm

Steps Taken for Summer 2008 – DEMAND SIDE MANAGEMENT PROGRAMS



Power Manager Load Management Switch

- Between 1991 and 2008, Duke Energy Indiana demand side management programs have achieved:
 - Approximately 169 MW of annual peak demand reductions
 - Over 686,000 MWh annual energy reductions
- 2008 projected peak load management reductions in July (adjusted for losses):

<ul style="list-style-type: none"> ▪ Special contracts (e.g., interruptible): ▪ Special contract – hourly pricing: ▪ PowerShare® <ul style="list-style-type: none"> ▪ Call (customer contractual commitment): ▪ Quote (voluntary, yet compensated): ▪ Power Manager – direct load control: 	164 MW 13 MW 81 MW 70 MW 44 MW
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Steps Taken for Summer 2008 –

TRANSMISSION & DISTRIBUTION SYSTEM

- \$151 M in long-term T&D investments for load growth and system enhancements
 - Gwynnevile 345/69 kV transformer
 - Bloomington 230/69 kV transformer
 - Clark Maritime Center substation
 - Carmel First Avenue substation
 - Noblesville Marilyn Road substation
 - Noblesville Firestone substation
 - Lafayette Shadeland substation
 - Avon South and Plainfield substations
 - French Lick North substation
- Energy Management System (EMS) replacement
- Power Delivery Work Center implementation
 - Mobile work management technology for routine work



Lafayette Shadeland Substation – May 2008

CHALLENGES FOR SUMMER 2008 AND BEYOND – OVERVIEW

- Managing commodity price volatility – market price trends
- Evolving future resource adequacy requirements
- Initiation of ancillary services market
- Planning for tighter and changing environmental requirements

Challenge –

MANAGING COMMODITY PRICE VOLATILITY – MARKET PRICE TRENDS

Commodity	2005	2006	2007	2008 (as of 5/16/08)	% Change 2008 vs. 2007
WTI Crude Oil Price (\$/Bbl)	\$56.70	\$66.25	\$72.36	\$126.29	+75%
July Nymex Henry Hub Natural Gas Price (\$/MMBtu)	\$7.57	\$6.05	\$6.21	\$11.26	+81%
July MISO CIN Hub On-Peak Power Price (\$/MWh)	\$75.17	\$60.09	\$57.56	\$98.00	+70%
Central Appalachia Compliance Coal (\$/Ton)	\$64.85	\$54.86	\$48.32	\$113.25	+134%
Illinois Basin High Sulfur Coal (\$/Ton)	\$37.50	\$32.91	\$32.83	\$72.50	+121%
Wyoming Powder River Basin High Btu Coal (\$/Ton)	\$9.77	\$12.11	\$9.70	\$14.25	+47%
SO ₂ Allowance (\$/Ton)	\$906.00	\$728.00	\$524.00	\$213.50	-59%
NO _x Allowance (\$/Ton)	\$2,907.80	\$1,847.50	\$807.00	\$789.20	-2%

Challenge –

EVOLVING FUTURE RESOURCE ADEQUACY REQUIREMENTS

- Summer 2008 is the first time that Indiana utilities are required to carry a minimum reserve margin to meet the new Reliability *First* 1 day in 10-year standard
- Beginning with the planning year June 1, 2009 – May 31, 2010, MISO will establish a planning reserve margin for each load serving entity as part of its Module E tariff
 - MISO still has to develop and file the financial settlement/enforcement provisions at FERC by June 25, 2008
 - The reserve margin requirement for summer 2009 will not be known until December 31, 2008
 - Module E reserve requirements will give higher capacity value to reliable resources vs. unreliable resources which will make the availability of generating resources even more important
 - Duke Energy Indiana may need to modify some of its Demand Response programs to ensure that they will count toward Module E resource requirements

Challenge -

INITIATION OF THE MIDWEST ISO'S (MISO) ANCILLARY SERVICES MARKET

- MISO's Ancillary Services Market (ASM) is currently scheduled to start on September 9, 2008
- With the initiation of the ASM:
 - MISO will become the balancing authority for balancing supply and demand under the ASM
 - Duke Energy will retain certain tasks as a local balancing authority
 - The buying and selling of regulation and contingency reserves will be integrated into the existing MISO energy market
- Duke Energy Indiana has taken a number of steps to prepare for the initiation of the ASM
 - Development of the Amended Balancing Authority Agreement and supporting documents
 - Modification of the Energy Management System (EMS) to be capable of deploying generation energy as directed by the MISO's generation control, rather than respond to our system
 - Development of training materials and training of personnel
 - Active participation in the MISO's preparatory activities

Challenge -

PLANNING FOR TIGHTENING AND CHANGING ENVIRONMENTAL REQUIREMENTS



Cayuga Station – January 2008

- Completion of environmental projects
 - Cayuga 1 FGD scheduled in service this fall
- Clean Air Mercury Rule overturn
 - Appeals court overturned in February 2008
 - Future of mercury regulation unclear
- New Source Review trial – May 2008
 - Favorable jury verdict for all Duke Energy Indiana units except Wabash River 2, 3 & 5
 - Remedy phase trial – December 2008
- Probable CO₂ emission regulations
 - Allowance allocation vs. auction
 - Input vs. output based allowance distribution

CONCLUSION

Duke Energy Indiana is prepared with adequate resources and infrastructure to meet its customers' needs during summer 2008.





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