

Gas / Electric Coordination

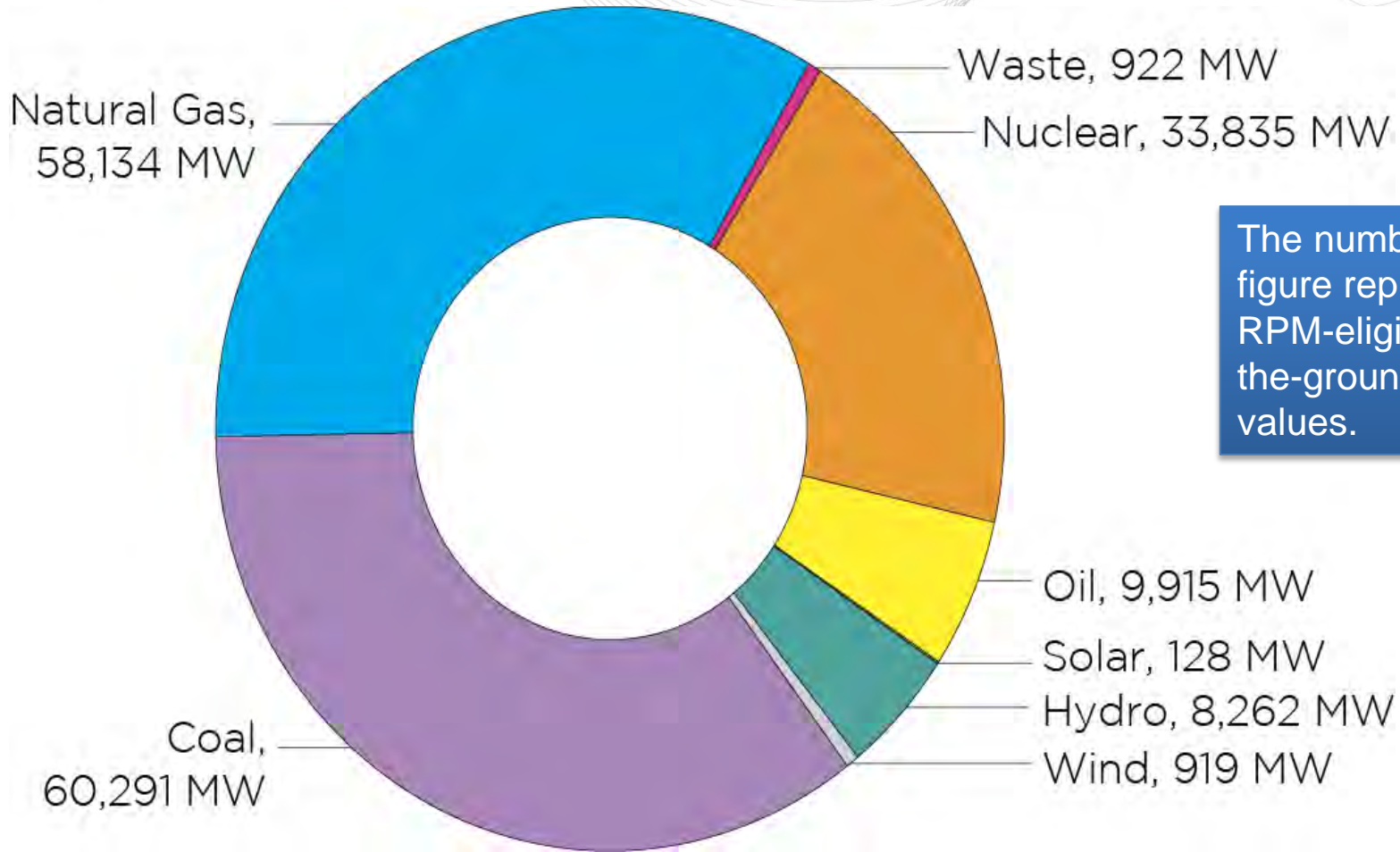
PIEOUG Meeting

March 1, 2016

Brian Fitzpatrick

Sr. Lead Fuel Supply Analyst

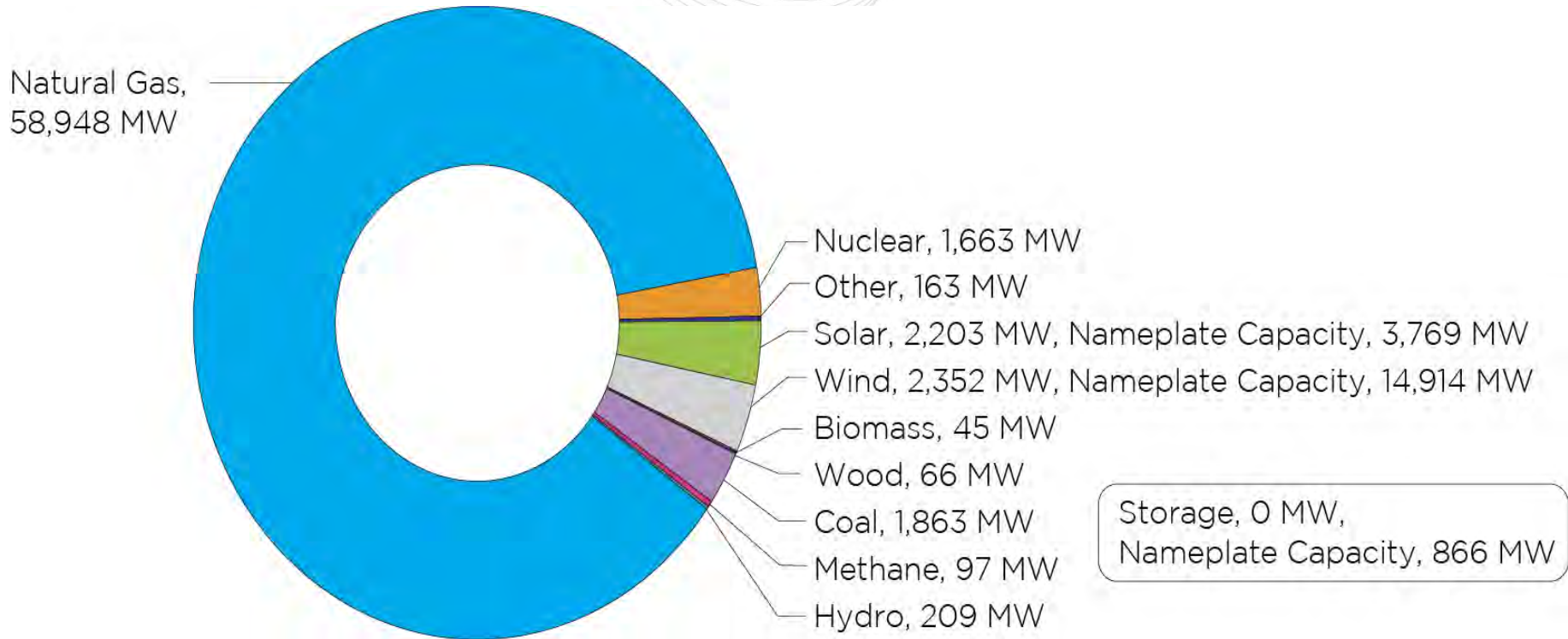
PJM Interconnection



The numbers in this figure represent RPM-eligible “iron-in-the-ground” MW values.

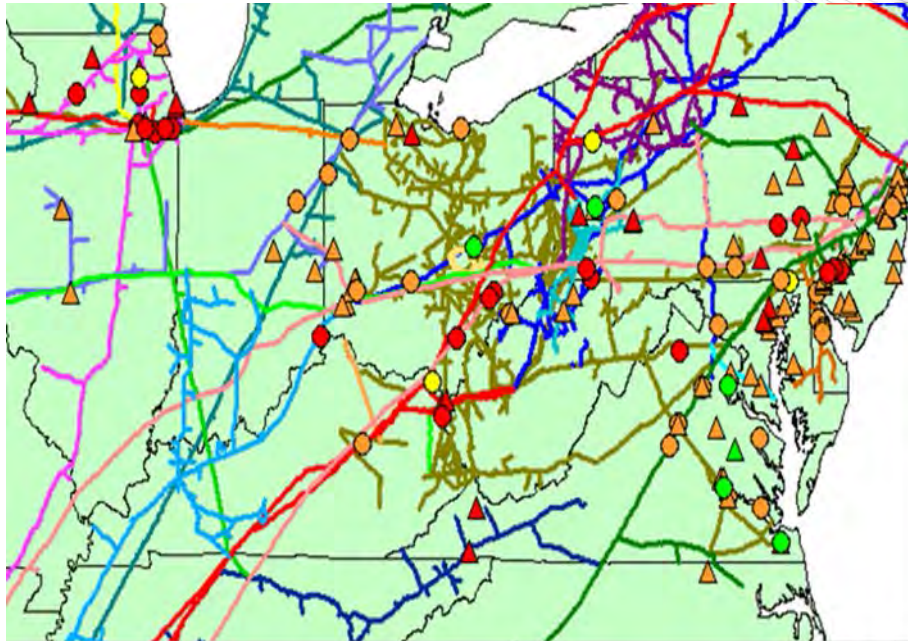
December 31, 2015

Queued Interconnection Requests (Requested Capacity Rights)



December 31, 2015

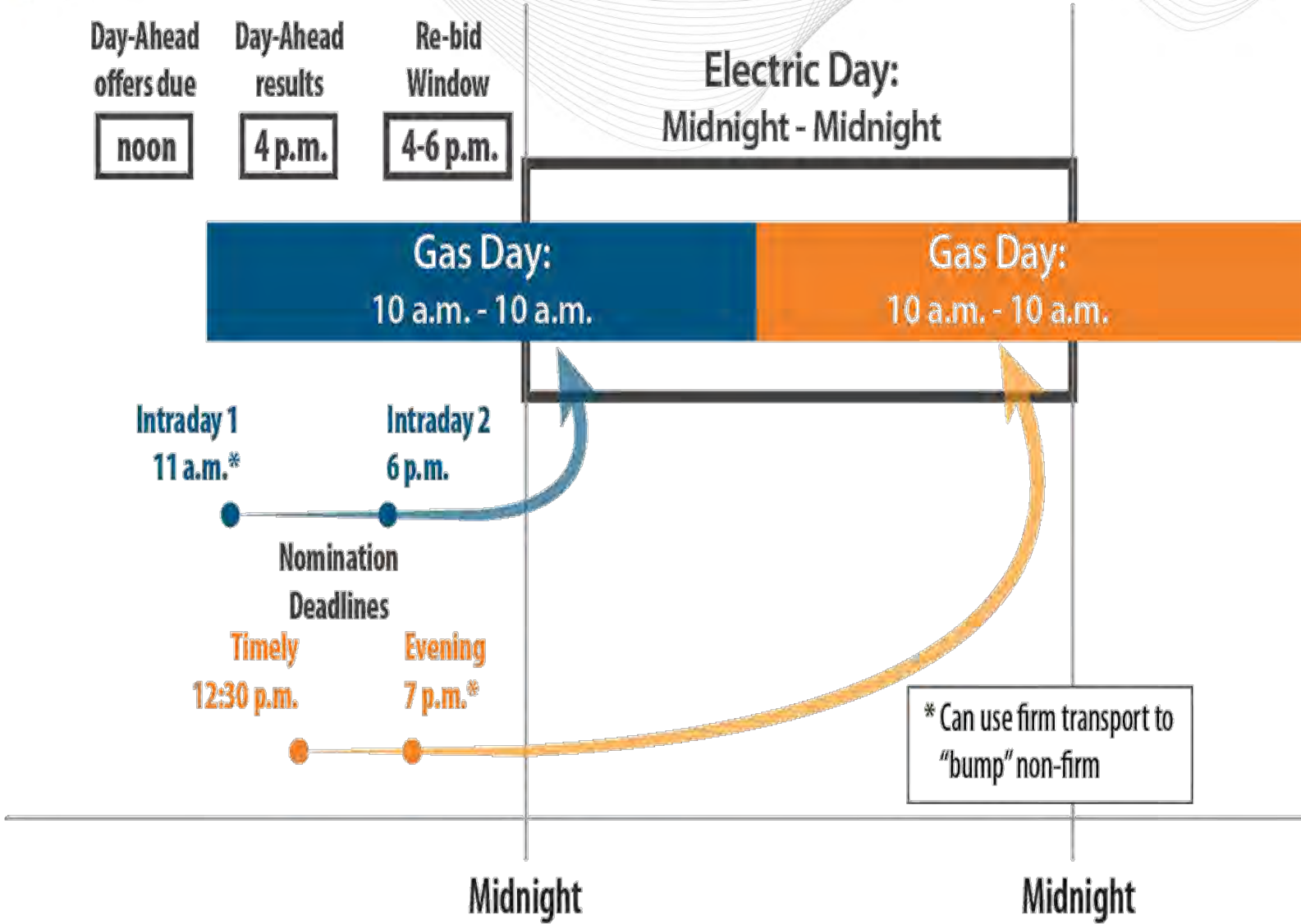
- **Accomplishments to Date**
 - Established Gas Electric Coordination Team
 - Signed Memorandum of Understanding with 9 interstate pipelines to foster communication and coordination in line with FERC Order 787
 - Developed analytical processes and tools to identify reliability risks for gas fired generation on a daily basis
 - Began outreach to Local Distribution Companies and Gas Generation operators to increase operational knowledge to further improve daily reliability assessments

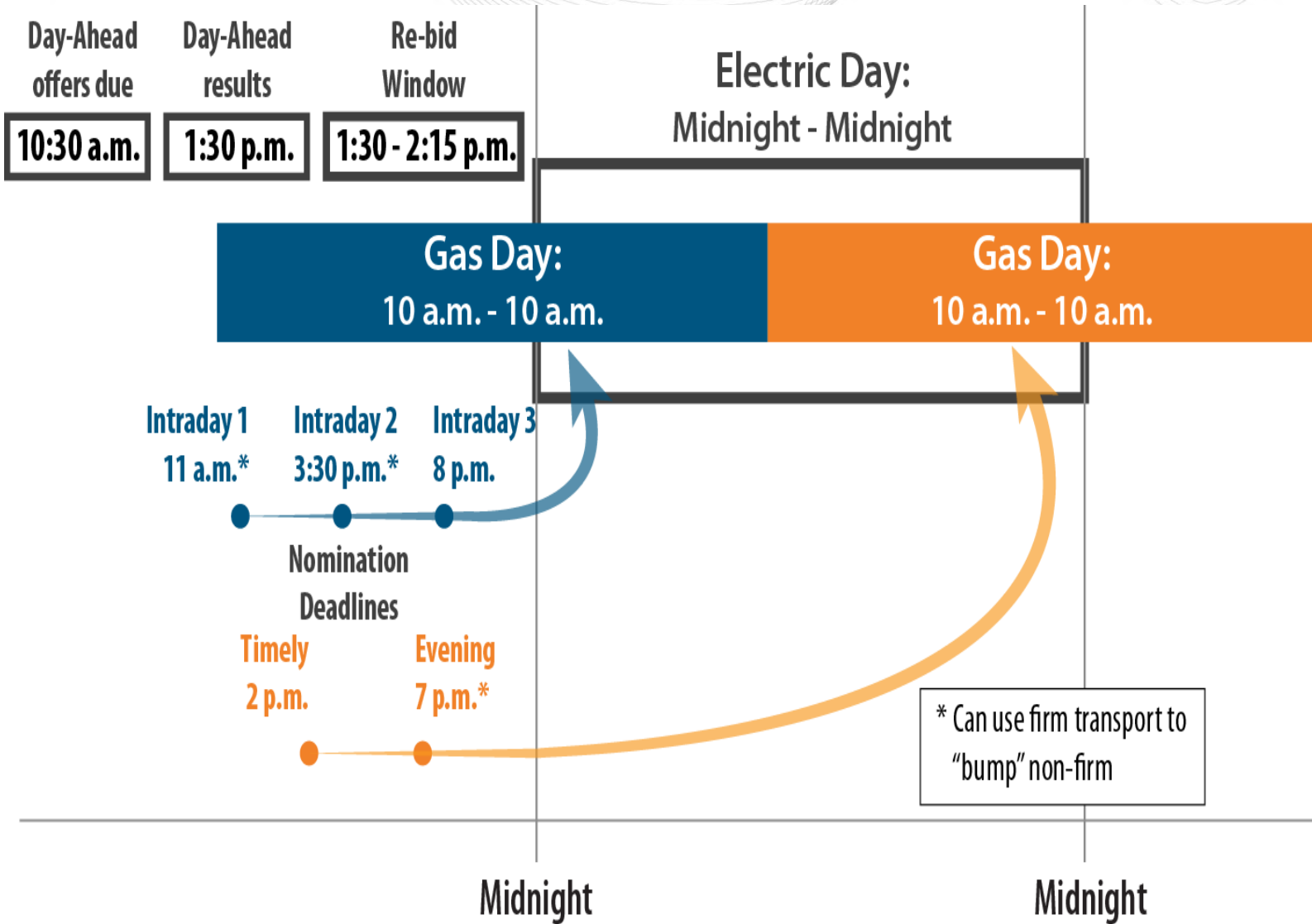


Algonquin	Equitrans	Rockies Express	Mainline Contract	Dual-Fuel Capable
Alliance	Guardian	Tennessee		
ANR	Horizon	Texas Eastern	● Yes	Yes
Big Sandy	KM Illinois	Texas Gas	● Yes	No
Central NY Oil & Gas	KO	Transco	● No	Yes
Columbia	Midwestern	Vector	○ Generator	
Crossroads	NFG	Interstate-Served	○ Generator	
Dominion Cove Point	NGPL	LDC-Served	△ Generator	
Dominion	NGO	Generator		
East Tennessee	Northern Border	LDC-Served		
Eastern Shore	Panhandle Eastern	Generator		



- Key Regulatory Drivers
 - FERC Order 787
 - Sharing of non-public operating information between interstate pipelines, public utilities and electric transmission operators
 - FERC Order 809
 - Adjustment of gas nomination cycles to improve gas-electric coordination
 - Timely nomination deadline moved from 12:30pm Eastern time to 2:00pm Eastern time
 - Addition of 3rd intraday nomination cycle





- **Looking Ahead**

- Use of Natural Gas for electric generation will continue to grow and supplant retiring coal fired units
 - Environmental Regulations
 - Massive supply of inexpensive natural gas
- Key Areas of Focus
 - Continue to work with Interstate Pipelines to identify incremental opportunities to improve operations
 - Ramp up outreach to Local Distribution Companies, Generators and Marketers to address coordination and communication improvements
 - Work with key stakeholders to assist with the development of innovative natural gas capacity products to address the unique needs of natural gas fired generators