# Department of Energy and Environment

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#### **Energy and Environment**

The Department of Energy and Environment conducts technical analysis, environmental review and field investigations to assure energy availability produced from all available fuel sources to the consumers of Ohio and the region. E&E processes electricity forecast cases, integrated resource planning, energy efficiency and portfolio compliance requirements, produces independent forecast reports of demand for energy in Ohio, participates in federal and state investigations regarding energy policy, delivery and reliability. And provides policy and analytical support for the Commission and others on energy issues. Also housed within the Department of E&E is the staff for the Ohio Power Siting Board and the Ohio Biomass Energy Program.

## Staff Qualifications

- Mechanical Engineering
- Electrical Engineering
- Environmental Science
- Masters Environmental Economics
- Education
- Economics
- Sociology
- Geology
- PhD Industrial and System Engineering
- Chemical Engineering
- Chemistry
- Mass Media and Organizational Communications
- Natural Resources

- Electronic Engineering Technology
- International Business
- Physics
- Government
- Masters City and Regional Planning
- Real Estate
- Environmental Biology
- Meteorology
- Oceanography
- Petroleum Engineering
- Finance
- Botany
- Business Administration and Marketing

### Director's Office

- Administrative Requirements
- Human Resources
- Legal and Policy Analysis
- Performance Management
- Billing
- Intranet
- Internet

## Planning and Market Analysis

- Retail Market Monitoring
- Wholesale Market Monitoring
- Long Term Forecasting
- Modeling
- Price Projections
- Capacity and Energy Auctions
- RTO Efforts
- SmartGrid

## **Energy Efficiency and Renewables**

- Energy Efficiency Programs and Contracts
- Demand Side Management Programs
- Renewable Energy Efforts
- Renewable Energy Credits
- Capacity and Energy Auctions
- SmartGrid

## Facilities, Siting and Environmental Analysis

- Transmission Reliability and Performance
- Environmental Policy and Energy Implications
- Technology Analysis and Advancement
- Energy Assurance
- Siting
  - Gas Transmission Siting
  - Electricity Transmission Siting
  - Generation Siting

## Ohio Power Siting Board Process







#### Mission Statement

To support sound energy policies that provide for the installation of energy capacity and transmission infrastructure for the benefit of the Ohio citizens, promoting the state's economic interests, and protecting the environment and land use.

## Member Agencies

- Public Utilities Commission of Ohio Chairman
- Ohio Environmental Protection Agency
- Ohio Department of Development
- Ohio Department of Health
- Ohio Department of Agriculture
- Ohio Department of Natural Resources
- Public Member
- Four Legislative Members
  - 2 from Ohio House of Representatives
  - 2 from the Ohio Senate

Balancing of interests is successfully achieved through active participation of the member agencies that comprise the Board



#### **Board Jurisdiction**

#### **Major Utility Facility**

- A generating plant of 50 megawatts or more;
- An electric transmission line of 125 kilovolts or more; or
- A gas or natural gas transmission line capable of transporting gas at more than 125 pounds per square inch of pressure

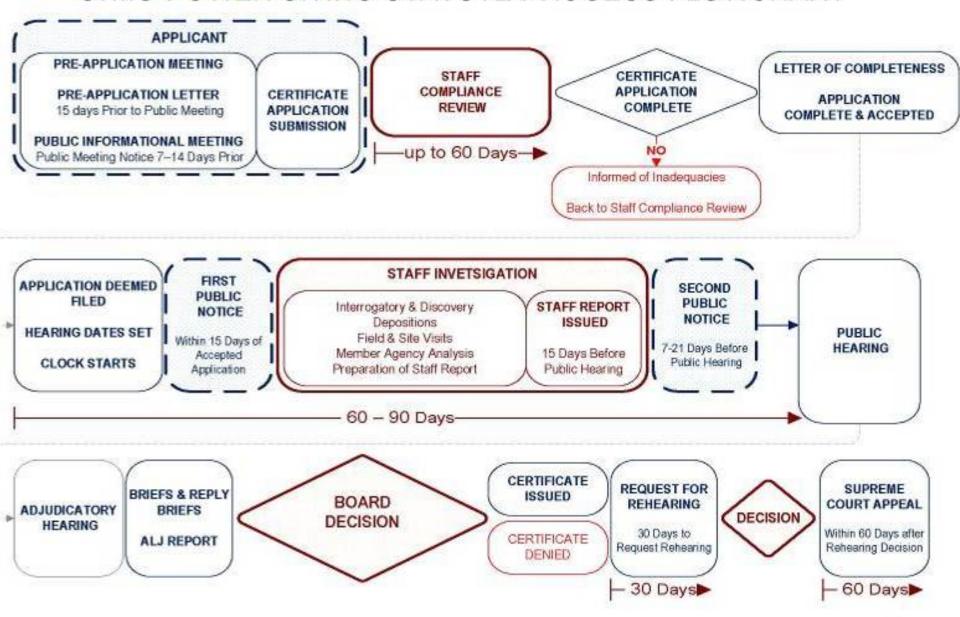
#### And,

Any wind farm of 5 megawatts or more;

#### **Process**

- Pre-Application meetings and conferences
- Pre-Application Public Informational meetings
- Application submitted
- Completeness Review
- Letter of Completeness
- Proof of Service
- Board Entry establishing Filing Date & Hearing schedule
- Public Notice published by Applicant
- Staff Report
- Public Hearing
- Adjudicatory Hearing
- Board Decision
- Appeal Process

#### OHIIO POWER SITING STATUTE PROCESS FLOWCHART\*



## **Public Participation**

#### **Formal**

- Intervention by Public Officials
  - Township Trustees, County Commissioners, City Officials, etc.
  - Notice Required
- Intervention by persons impacted
  - Request for intervention
  - Counsel required

## **Public Participation**

#### **Informal**

- Written submissions to the Board
- Toll-free Phone Inquiries
- Sworn Testimony at Public Hearing

### Notification

- Filings of notices with local officials
- Filings of applications at local libraries
- Written notice to directly impacted landowners of upcoming meetings/hearing

#### **OPSB** Decision

- The need for the (transmission) facility
- The probable environmental impact
- Whether the facility represents the minimum adverse environmental impact considering the technology that is available and the nature and economics of the various alternatives
- Compliance with all air and water pollution control and solid waste disposal laws and regulations
- Consistent with regional plans for expansion of the electric power grid, and the interests of electric system economy and reliability
- Public interest, convenience and necessity
- Impact on agricultural lands
- Water conservation practices

## **OPSB Electric Generation Applications**

(1998-2012)

GENERATION SUMMARY					
GENERATION CASES BY STATUS  Number Of Cases  Capacity (MW)  Intangible Costs					
Certified - Operational	16	7,460	\$2,951,633,700		
Certified - Not Yet Online	21	7,229	\$8,193,567,497		
Certification Pending	8	1,653	\$1,195,000,000		
TOTALS:	45	16,342	\$12,340,201,197		

GENERATION CASES BY FACILITY TYPE	Number Of Active Cases	Capacity (MW)	Estimated Capital & Intangible Costs
Coal (i.e. IGCC)	4	2,169	\$3,974,400,000
Cogeneration-Waste Heat	4	405	\$524,831,197
Combined-Cycle	6	4,797	\$1,571,000,000
Compressed Air	1	2,700	\$1,650,000,000
Simple-Cycle	11	4,525	\$1,537,190,000
Wind	19	1,746	\$3,082,780,000
FACILITY TOTALS:	45	16,342	\$12,340,201,197 <sup>19</sup>

## OPSB Transmission Applications (1998-2012)

ELECTRIC TRANSMISSION SUMMARY					
TRANSMISSION LINE CASES BY STATUS  ACTIVE  Number Of Cases  Miles  Estimated Capital & Intangile Costs					
Certified - Operational	11	71.7	\$40,825,000		
Certified - Not Yet Online	7	38.5	\$66,758,400		
Certification Pending	6	86.1	\$34,458,429		
TOTALS:	24	196.2	\$142,041,829		

VOLTAGE LEVEL STATS (kV)			
ACTIVE			
138	19	150.8	\$118,170,829
345	5	45.4	\$23,871,000
765	-	-	-
VOLTAGE LEVEL TOTALS:	24	196.2	\$142,041,829

GAS TRANSMISSION SUMMARY						
TRANSMISSION LINE CASES BY STATUS  ACTIVE  Number Of Cases  Miles  Estimated Capital & Intangible Costs						
Certified - Operational	13	109.4	\$125,095,623			
Certified - Not Yet Online	-	-	-			
Certification Pending	3	241.5	\$559,944,714			
TOTALS:	16	350.9	\$685,040,337 <sup>20</sup>			

## OPSB Construction Notices/Letter of Notifications (1998-2012)

ELECTRIC LETTER OF NOTIFICATIONS				
Number Of Cases Miles Estimated Costs				
Operational, Completed	173	139.4	\$125,901,372	
Not Yet Completed 22 30.0 \$35,406,827				
TOTALS: 195 169.4 \$161,308,199				

ELECTRIC CONSTRUCTION NOTICES				
Number Of Cases Estimated Costs				
Operational, Completed	74	\$71,748,886		
Not Yet Completed 12 \$71,748,886				
TOTALS: 86 \$143,497,772				

GAS LETTER OF NOTIFICATIONS				
Number Of Cases Miles Estimated Costs				
Operational, Completed	13	156.7	\$125,095,623	
Not Yet Completed 5 10.5 -				
TOTALS:	18	167.2	\$125,095,623	

GAS CONSTRUCTION NOTICES				
Number Of Cases Estimated Costs				
Operational, Completed	69	\$56,779,585		
Not Yet Completed	15 \$19,886,000			
TOTALS:	<b>\$76,665,585</b> 21			

## **OPSB Wind Projects**

	OHIO WIND TOTALS				
			Certified	Pending	
		Megawatt Totals:	1,051	755	
	Tur	bine Count Totals:	571	366	
	Total Po	tential Megawatts:	1,	806	
	Total F	Potential Turbines:	9	37	
Received Certi	ificate of Environmental Compati	ibility and Public Ne	ed		
Case No. / Project  County  Date Number of Certified Turbines Certified N					
08-0666-EL-BGN / Buckeye Wind Project	Champaign	22-Mar-10	54	135	
09-1066-EL-BGN / Blue Creek Wind Farm Project	Paulding/Van Wert	23-Aug-10	159	350	
09-0277-EL-BGN / Hog Creek Wind Farm I	Hardin	22-Mar-10	27	48.6	
09-0479-EL-BGN / Hardin Wind Farm	Hardin	22-Mar-10	200	300	
09-0980-EL-BGN / Timber Road I Wind Farm	Paulding	23-Aug-10	32	48.6	
10-0369-EL-BGN / Timber Road II Wind Farm 10-0369-EL-BGN / Timber Road III Wind Farm	Paulding Paulding	18-Nov-10 28-Feb-11	55 28	150.4	
10-0654-EL-BGN / Hog Creek Wind Farm II	Hardin	29-Aug-11	8	18.4	
11-0757-EL-BGA / Hog Creek Wind Farm I	Hardin	25-Jul-11	See 09-0277	See 09-0277	
11-1995-EL-BGA / Blue Creek Wind Farm	Paulding/Van Wert	25-Jul-11	8	See 09-1066	
11-3446-EL-BGA / Hardin Wind Farm	Hardin	29-Aug-11	See 09-0479	See 09-0479	
		Totals:	571	1,051	
Pending Certi	ficate of Environmental Compati	bility and Public Ne	ed		
Case No. / Project	<u>County</u>		Number of <u>Turbines</u>	Pending <u>MW's</u>	
10-2865-EL-BGN / Black Fork Wind Farm	Crawford/Richland		91	200	
11-2400-EL-BGN / Ashtabula Wind Energy <sup>2</sup>	Ashtabula		28	50	
11-3676-EL-BGN / Leipsic Wind Farm	Putnam		75	150	
11-4886-EL-BGN / HoneyCreek Wind <sup>2</sup>	Crawford/Seneca		115	184	
12-0160-EL-BGN /Buckeye II Wind Farm <sup>2</sup>	Champaign		57	171	
		Totals:	366	755	

<sup>(1 -</sup> Application not yet received. Turbines/Megawatts unknown.) (2 - Application not yet received)

## **OPSB Summary**

- One-Stop Siting Process
- Timely action: Approximately 6 to 12 months for applications, with statutory time mandates; even more expedited schedules may be an option under certain circumstances
- Regulatory certainty: process is known and well practiced
- Sole jurisdiction: local and public participation welcome in the process, but sole decision rests with the state (OPSB)
- Our siting process is fair and efficient and has been put forth as an example for others to follow
- Having seen our success, several states and countries have adopted new siting legislation modeled after Ohio's statute

## Ohio Power Siting Board

www.OPSB.ohio.gov