



Indiana Energy Presentation  
to the  
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Planning Meeting

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# WHY AN INDIANA ENERGY ASSURANCE PLAN?

- State Law
  - Requires the Indiana Department of Homeland Security (IDHS)
    - IC 10-14-3-9 (a)
- Federal Law
  - EPACK
    - State Energy Office to Write Plan
- Common Sense

# INDIANA PLAN: OVERVIEW

- **Legal Authority**
  - Key statutory language authorizing official response to energy emergencies.
- **Energy Stakeholders**
  - Principal state agencies and industry stakeholders
  - Energy markets and how energy stakeholders respond to shortage.
- **Energy Emergency Management**
  - Various intensities of energy emergency
  - Suggests appropriate responses.
- **State Energy Profile – Vulnerability and Risk**
  - Energy sources used by the state’s major consumption groups
  - Relative vulnerability to energy loss in each sector
  - Energy assurance risk associated with such vulnerability.
- **Suggested Response Measures**
  - Voluntary and “mandatory” measures listed in the Response Measures section



# WHAT WILL WE COVER TODAY?

- Legal Authority
- Energy Stakeholders
- Energy Emergency Management
- Response Management

# LEGAL AUTHORITY

- ❖ Indiana Code, Title 10 , **Public Safety**
  
- ❖ Indiana Code, Title 10, Article 14, **Emergency Management**
  - ❖ Governor:
    - ❖ Has authority to declare a disaster emergency by Executive Order.
    - ❖ Can designate any agency deemed necessary to manage the emergency
      - ❖ Typically, the Indiana Department of Homeland Security (IDHS)
  
  - ❖ IDHS:
    - ❖ Has authority to develop and manage the State's Emergency Plan.

# INDIANA ENERGY STAKEHOLDERS

- ❖ State Agencies
- ❖ Electricity Stakeholders
- ❖ Natural Gas Stakeholders
- ❖ Petroleum Stakeholders

# INDIANA DEPARTMENT OF HOMELAND SECURITY (IDHS)

- Emergency Response Division
  - Primary unit working with local emergency agencies and first responders
  - Coordinates area-wide and state-wide responses
  - Assists local jurisdictions, commerce and individuals
- The Planning Division
  - Assures creation and maintenance of various plans
  - Support & development of an energy assurance plan
- The Training Division
  - Assure that stakeholders are drilled on how to respond to energy emergency.
- Other divisions
  - Assigned energy emergency response duties as needed



# The Indiana Utility Regulatory Commission (IURC)

- The Indiana Utility Regulatory Commission is authorized under Indiana Code, Title 8, Utilities and Transportation. This article regulates various aspects of the public utilities' business including rates as well as:
  - Financing
  - Bonding
  - Environmental compliance plans
  - Service territories
  - Construction projects
  - Plant and equipment acquisition
    - While the IURC is a fact finding body hearing evidence in cases filed before it, it can also initiate investigations into all aspects of regulated utility rates and practices



# IURC PRINCIPAL ENERGY ASSURANCE OPERATIONS

- **Loss of Service**
  - Communicate with all levels of the electric system
  - Personnel at the Emergency Operations Center
  - Coordinating with affected utilities
  - ESF - 12
- **Regional Transmission Organizations**
  - Interface with Regional Transmission Organizations.
- **Review**
  - Sufficiency of generation
  - Weather
  - Public response (including appeals for conservation)
  - Probable reaction to rotating blackouts
  - Capability of first responders re: rotating blackouts or other actions as needed



# IURC: NATURAL GAS



- **Pipeline Safety Division**

- Federal law/State law

- The most recent is the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 December 29, 2006
- Pipeline safety and damage prevention
- Protection for underground pipelines
- Integrity Management Programs for the distribution of natural gas
- Pipeline inspection and enforcement is an ongoing task of the **Pipeline Safety Division** and Indiana inspectors are regularly trained to maintain this obligation
- Control room management

# INDIANA OFFICE OF ENERGY AND DEFENSE DEVELOPMENT

- **Mission**

1. **TRADE CURRENT ENERGY IMPORTS FOR FUTURE INDIANA ECONOMIC GROWTH**
2. **PRODUCE ELECTRICITY, NATURAL GAS AND TRANSPORTATION FUELS FROM CLEAN COAL AND BIOENERGY**
3. **IMPROVE ENERGY EFFICIENCY AND INFRASTRUCTURE**



# INDIANA OFFICE OF ENERGY AND DEFENSE DEVELOPMENT



- State Energy Plan and an Energy Assurance Plan
- Investigate and recommend technologies
- Improve energy efficiency
- Identify and promote alternatives to conventional fuels
- Enhance the state's energy infrastructure
- Eliminate possible constraints in energy transmission and transportation
- Identify regulatory and other barriers
- In the event of an energy emergency
  - EOC
  - Routinely assists in expediting energy restoration where government assistance is needed
  - Manage authorized mitigation measures

# ELECTRICITY STAKEHOLDERS

- ❖ Statewide Organizations

  - ❖ Municipal Utilities

  - ❖ Rural Electric Membership Utilities

- ❖ Investor Owned Utilities

# STATEWIDE ORGANIZATIONS

- Indiana Municipal Electric Association
- Indiana Statewide Association of Rural Electric Cooperatives
- Indiana Energy Association
- Indiana Coal Council

# INDIANA MUNICIPAL ELECTRIC ASSOCIATION (IMEA)



- 72 municipal utilities
- Works closely with the Indiana Municipal Power Agency
- Trains
- Coordinates mutual aid agreements



# INDIANA STATEWIDE ASSOCIATION OF RURAL ELECTRIC COOPERATIVES (INDIANA REMC)

- ❖ 58 thousand miles of distribution lines in 89 of the state's 92 counties
- ❖ 500,000 customers in 38 REMC
  - ❖ 2 Generation Coops
- ❖ Rural electric companies have a special burden
  - ❖ Manages distribution lines with the fewest customers per line mile

**Indiana's Electric Cooperatives**  
(Approximate boundaries)

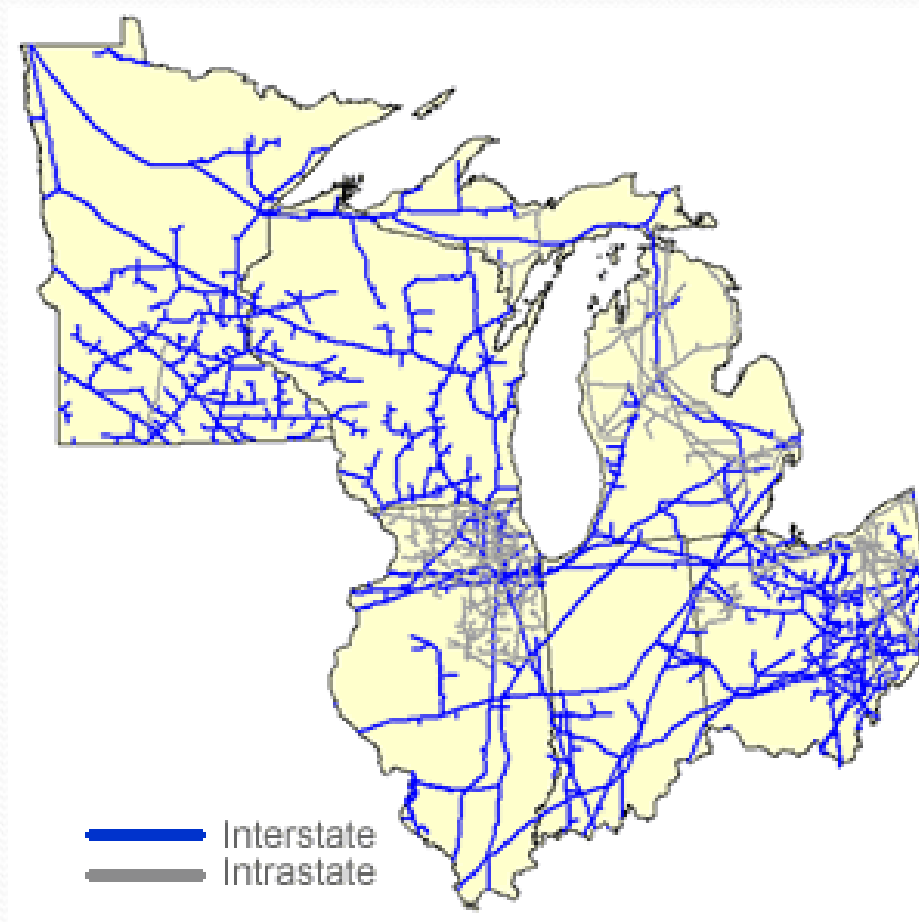


- Wabash Valley Power Association
- Hoosier Energy REC, Inc.

# INVESTOR OWNED UTILITIES (IOU)

- **Duke Energy Indiana (formerly PSI Energy)** – Plainfield
- **Indiana Michigan Power** (subsidiary of American Electric Power) - Fort Wayne
- **Indianapolis Power & Light Co.** (subsidiary of AES Corporation, Arlington, Virginia) – Indianapolis
- **Northern Indiana Public Service Co.** – Merryville
- **Vectren Corporation** (formerly Southern Indiana Gas & Electric) - Evansville

# NATURAL GAS STAKEHOLDERS



# PIPELINE COMPANIES

- **ANR Pipeline Company**, Owned by TransCanada, Houston, Texas
- **Midwestern Gas Transmission Company** Operated by: ONEOK, Tulsa Oklahoma
- **Northern Border Pipeline Company**, Owned by ONEOK, Tulsa Oklahoma
- **Panhandle Eastern Pipeline Company and TrunkLine Gas Company**, Owned by the Southern Union Companies, Houston, Texas
- **Texas Eastern Transmission Corporation**, Owned by the Spectra Energy Corporation, Houston, TX
- **Texas Gas Transmission Corporation**, Owensboro, KY
- **Vector Pipeline**, Livonia, MI

# INDIANA PRINCIPAL GAS COMPANIES

## **NiSource**

- **Northern Indiana Public Service Company (NIPSCO)**, Merrillville, Ind.
- 700,000 natural gas customers
- (430,000 electric customers) across the northern third of Indiana,
- 3.7 million natural gas and electric customers primarily in nine states”

## **Vectren Companies**

- **Indiana Gas Company (Vectren North)**
- **Southern Indiana Gas & Electric Company (SIGECO or Vectren South)**
- 990,000 customers

## **Citizens Gas & Coke Utility, Evansville**

- 285,000 customers in Marion County
- Small subsidiary in Westfield

## **ProLiance Energy, Indianapolis**

- Manages energy supply, transportation, and storage portfolios for Citizens Gas & Coke Utility and portions of Vectren Energy

# PETROLEUM STAKEHOLDERS

## Indiana Petroleum Energy Associations

- **American Petroleum Institute – Indiana Petroleum Council**
  - Part of the national American Petroleum Institute (API)
  - Represented by a local law firm
  - Represents interests of API member companies before regional, state and local officials
- **Indiana Petroleum Marketers and Convenience Store Association (IPCA)**
  - Represents many in-state petroleum companies including most jobbers
  - Works with state elected and appointed officials on retail operations
    - distribution and direct sale of petroleum products
  - Communications network
  - Can help state officials in working with a large number of petroleum product companies
  - Can help aggregate information and special requests from dealers
  - Point organization re: shortage-related suspensions of petroleum product driver hours
- **Indiana Propane Gas Association (IPGA)**
  - Provides services similar to IPCA
  - Training (enhanced through the national Propane Education and Research Council)
  - 120 LPG outlets
  - 100 hundred are independent businesses
    - Remainder with interstate companies

# REFINERIES



- **BP Products oil refinery in Whiting**
  - BP invested \$3.8 billion to upgrade recently
  - Adds capacity for an additional 1.7 million bbls/day providing motor fuel
- **Countrymark**
  - Cooperative, is located in Mount Vernon
  - Refines motor gasoline
  - High grade of diesel fuel used primarily for farming
  - Heating oil fuel is produced as well
- **Refining is an extremely complex process and is tightly controlled for environmental purposes**
  - Indiana Department of Environmental Management
    - “has issued a draft air permit for public review and comment which is based on an application BP filed in which we proposed lower air emissions for the refinery after completion of the modernization project in 2011”

# PRODUCT DISTRIBUTION

- Refined petroleum products are received in Indiana by
  - Pipeline
  - Barge
  - Tanker truck
  - Bulk terminals fill over-the-road delivery vehicles or support fuel pumps
  - 38 Indiana petroleum terminals listed by the U.S. IRS



# ENERGY EMERGENCY MANAGEMENT

- ❖ Emergency Support Functions
- ❖ Electricity Emergency Management
- ❖ Natural Gas Management
- ❖ Petroleum Management
- ❖ Public Information Management

# EMERGENCY SUPPORT FUNCTIONS

- ❖ Energy providers and facility stake holders hold primary responsible for restoration of normal supply and distribution.
- ❖ ESFs are to provide public and private entities with a focal point for coordination of supplies and recovery operations.
- ❖ ESFs are to advise state and local officials on priorities for appropriate recovery actions.
- ❖ ESFs work with the stakeholders to develop open lines of communications and to foster strong relationships in developing emergency response procedures.

# EMERGENCY SUPPORT FUNCTION 12 (ESF-12)

- Derived from Federal Response Plan
- Basic Guidance for Indiana energy emergency response management
- DHS is the state's overall command and control agency for emergencies
- IURC is the lead agency for ESF-12
- OED is the undesignated "First Lieutenant"

# GOALS OF THE INDIANA ESF-12

- Energy provider and facility stakeholders hold primary responsibility for restoration of normal supply and distribution
- Provide public and private entities with a focal point for coordinated response to energy supply and distribution threats as well as interruptions
- Advise state and local officials on priorities for appropriate actions including “energy restoration, assistance and supply”
- Assist industry, state and local authorities with response measures related to energy supply
- Assist other state agencies in locating fuel for the following priority operations:
  - Transportation
  - Communications
  - Emergency operations
  - National defense
- Make appropriate recommendations to enhance energy efficiency (including conservation)
- Inform and guide state and local government and the general public

# DESIGNATED STAKEHOLDERS FOR ESF-12

## Public Agencies:

- Indiana Utility Regulatory Commission (**IURC**)
- Department of Homeland Security (**IDHS**)
- Indiana Office Economic Development – Office of Energy and Defense Development (**OED**)
- Office Utility Consumer Counselor (**OUCC**)
- Family and Social Services Administration (**FSSA**)
- State Department of Health (**IDOH**)
- Military Department of Indiana (**MDI**)

## Public Not-for Profit Sector:

- Municipal Cooperatives (represented by Indiana Municipal Electrical Association (**IMEA**))
- Rural Electric Cooperatives (**REMC**, represented by Indiana Statewide Association of Rural Electric Cooperatives (**ISAR**))

## Private Sector (And by implication)

- Energy Industry (interpreting overarching statements)
  - Utilities (i.e., electric and natural gas **IOU**, **LDC**)
  - Regional Transmission Organizations (**RTO**, i.e., **MISO & PJM**)
  - Other energy providers (e.g., Petroleum represented by Indiana Petroleum Marketers & Convenience Store Association and state propane association, (**IPCA** and **IPGA**))

# ENERGY ASSURANCE

- Indiana Electric and Gas utilities must report interruption of service to their customers to the IURC.
- When shortage is sufficiently widespread, the state may activate local community emergency operations centers (or the state EOC) to facilitate coordination among utility providers

# State Rules for Electric

## 170 IAC 4-1-123 Interruption of Service; timing; records

### Reporting

- The requirements for the reporting of sustained service interruptions are as follows:
- (1) A utility shall report any interruption in service that is not planned that meets the following criteria:
- (A) For investor-owned utilities, interruptions of service lasting two (2) hours or more and affecting two percent (2%) or five thousand (5,000) customers, whichever is fewer
- (B) For REMCs\*, interruptions of service lasting two (2) hours or more and affecting one thousand five hundred (1,500) or more customers

### Timing of Report

- (2) The regularly scheduled intervals for reporting times shall be as follows:
- (A) On business days: 6:00 a.m., 9:00 a.m., 11:00 a.m., 2:00 p.m., 4:00 p.m., and 9:00 p.m., Eastern Standard Time (EST) (Indianapolis time)
- (B) On non-business days: 6:00 a.m., 2:00 p.m., and 9:00 p.m. Eastern Standard Time (EST) (Indianapolis time)

Source: 170 IAC 4-1-23 Interruptions of service; timing; records

\* NOTE: Rural Electric Membership Cooperative

# State Rules for Natural Gas

- **170 IAC 5-3-4 Reports to Pipeline Safety Division of the IURC**
- Paragraph (c) Interruption Of Service Reports.
  1. Keep a record of any interruption.
  2. Notify the Commission by telephones at the earliest practicable moment following discovery and confirming by a written report within twenty (20) days thereafter.....

# STATE NATURAL GAS RULES

## State Rules for Natural Gas Emergency Plans 170 IAC 5-3-2 Federal regulations, revision

- ITEM XIII–Emergency Plans; (Ref: Title 49 CFR, Part 192, Section 192.615)
- Paragraph (e) shall read:
- (e) Establish liaison with appropriate communication officials, such as newspaper, radio and television, for assistance in keeping the public informed during emergencies
- Paragraph (f) shall read:
- (f) Each operator shall carry a listing in the current telephone directory of each community which it serves or within which it operates whereby a responsible employee or agent of the operator may be reached on a 24-hour basis. The listing shall be under the name of the operator with a designation for hours other than regular business hours

# ENERGY ASSURANCE – PETROLEUM

- **Companies maintain in-house and contract labor to repair infrastructure**
  - *Not subject to state and federal regulations*
- **Possible steps taken**
  - Increase refining runs for certain products if feasible within the parameters of refinery capability, capacity and safety
  - Acquire additional crude oil where possible
  - Seek additional finished products from refineries outside of the affected region
    - Oil is a fungible international commodity
    - It is possible that an American company can be outbid by a foreign company and importing tankers may not make timely landfall at a U.S. port in order to satisfy demand

# ENERGY ASSURANCE – PETROLEUM

- **On local level, petroleum product jobbers will journey to distant terminals**
  - Company & contract crews dispatched to repair infrastructure
  - Pipeline companies maintain crews as well
  - Devise work-around for damaged pipeline and exchange products
- **Obtain waivers from environmental and road safety restrictions**
  - Move product expeditiously
- **Requests for suspension of driver's hours on interstate highways**
  - Federal Motor Carrier Safety Administration (FMCSA), regional office
- **Supply emergency vehicles and other designated priority users with mobile refueling stations**
  - Seek additional supply trucking as needed if local vehicles cannot be used
- **Work with local, state and federal officials to alleviate hardship**

# MEASURES

## Potential Steps Government Can Take During Energy Emergencies

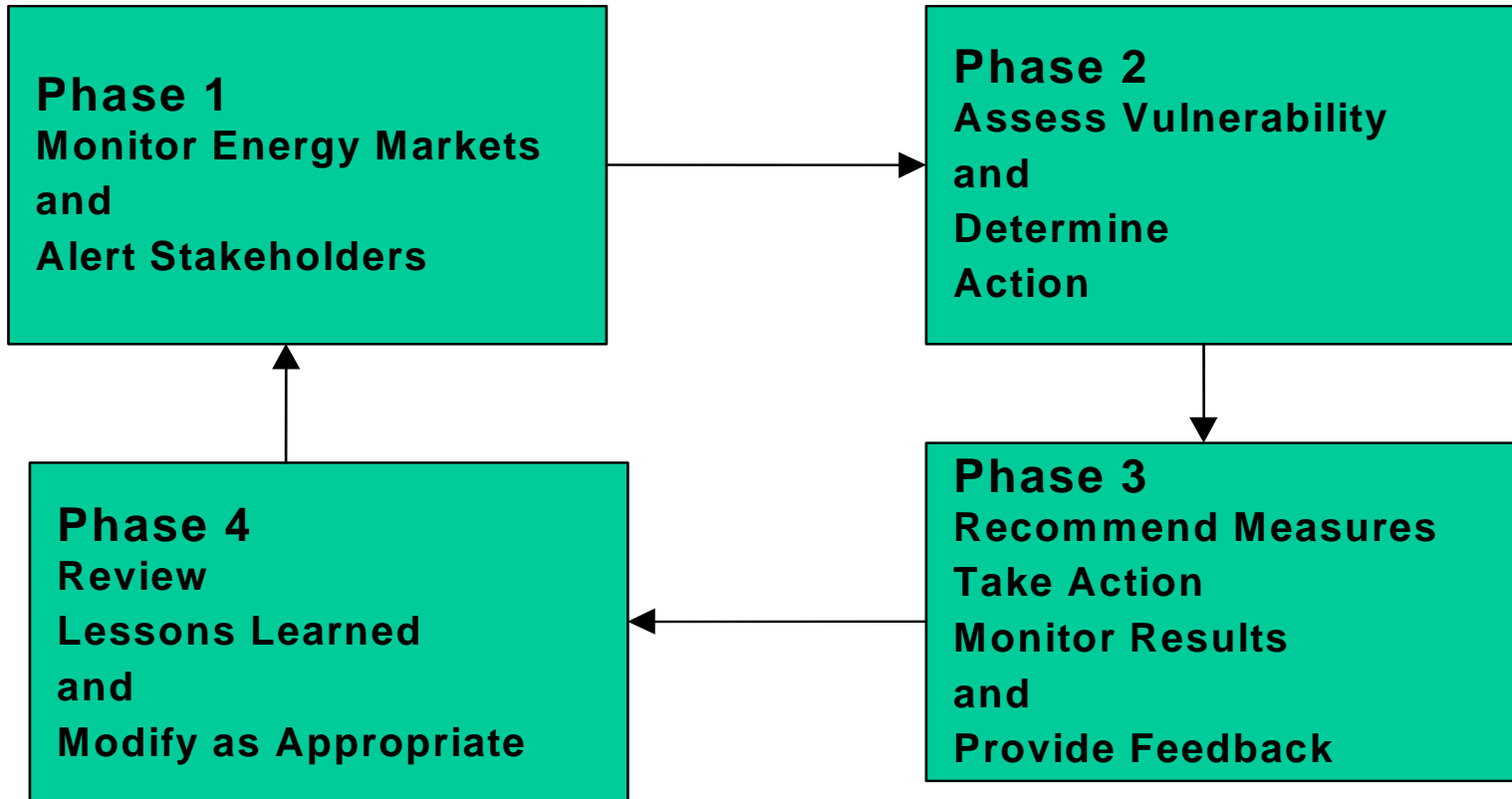
- Purpose:
  - Buy time
  - Assist industry recovery efforts
  - Reduce energy demand
  - Help the public cope with shortage
- When working within the State Response Plan, IDHS
  - May take steps that it apply to all emergencies
  - Arrange for community assistance
    - Congregant care
    - Assistance for roadway clearance
    - Health and human service activities
    - Requests for federal disaster assistance

# PUBLIC RELATIONS

Figure 43 - Public Relations

Phase	Detailed Public Relations Steps for the IURC and Associated Responders Working Under ESF-12
<b>Alert</b>	<ul style="list-style-type: none"> <li>• Review and reinforce communications within the state and ascertain that everyone understands their role as well as what can and cannot be said and by whom.</li> <li>• Work with the IDHS and inform the Governor's Office. Keep Governor's staff and legislative offices informed.</li> <li>• Review/prepare graphic energy market presentations and other materials to explain consumption patterns and anomalies.</li> <li>• Keep IDHS public relations officer up-to-date.</li> <li>• Provide basic supply &amp; demand data.</li> <li>• Coordinate with the IDHS on media contacts to help (especially newly assigned) reporters understand basic energy facts and issues.</li> <li>• Review weather forecasts.</li> <li>• Estimate the probability of greater shortage.</li> <li>• Prepare briefings on possible supply and demand restraint measures should shortage intensify.</li> </ul>
<b>Mild Shortage</b>	<ul style="list-style-type: none"> <li>• Maintain information actions per above.</li> <li>• Coordinate with IDHS, IURC and OED to draft energy conservation recommendations if shortage is predicted to reach moderate level.</li> <li>• Provide media advisories on setting back thermostats, using cooking fuel wisely, checking heating equipment and conserving hot water.</li> <li>• Consider public meetings and use of the Internet as appropriate.</li> </ul>
<b>Moderate Shortage</b>	<ul style="list-style-type: none"> <li>• Maintain information actions per above.</li> <li>• Governor may send conservation recommendations and ask IDHS or IURC to explain the details.</li> <li>• IDHS/IURC media briefings (depending on type of emergency) based on state energy data.</li> <li>• Follow-up messages may be made by the Governor to assure public and encourage continued cooperation and compliance.</li> </ul>
<b>Severe Shortage</b>	<ul style="list-style-type: none"> <li>• Maintain information actions per above.</li> <li>• Governor may recommend voluntary or mandatory measures. IDHS or IURC may explain details.</li> <li>• IDHS media briefings held (sometimes in conjunction with energy stakeholder representatives).</li> <li>• Follow-up messages from Governor to assure public and maintain compliance.</li> <li>• IDHS (in coordination/conjunction with the Governor's Office) announces enforcement actions if any.</li> </ul>

# RESPONSE MANAGEMENT



# PHASE 1

## Questions relating to monitoring and assessment:

- What is the nature/cause of the problem?
- How extensive is the problem?
- What is the estimated duration of the problem?
- Who is affected, where and how?
- Who needs to be informed?

# PHASE 2

## Mechanisms relating to assessment and determining action:

- Make contact with and/or inform stakeholders as appropriate
- Inform policymakers
- Identify options
- Determine if and when actions might be appropriate and needed:
  - Energy industry level action
  - Behind-the-scenes action
  - Public level actions

# PHASE 3

## Questions and suggestions for recommending and taking action:

- How quickly can actions be implemented?
- How effective are actions taken?
- What is the appropriate legal authority?
- What are the limitations in the legal authority?
- What voluntary actions can be taken first?
- If mandatory actions are required, how quickly must they be phased in?
- Which mandatory actions are to be phased in first (least to greatest recommended)?
- Ask if the best action may be no action at all

# Phase 4

## Review the following:

- Status of pre-emergency information
- Rapidity and accuracy of assessment
- Appropriateness of recommended actions
- Effectiveness of actions taken
- Did the actions matter or did the problem solve itself?
- Were essential stakeholders left out of the loop?
- Did the stakeholders appreciate what was done?
- How did the public react?
- What should be changed, eliminated, improved?