



National Demand Response Action Plan

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Statutory Requirements

Section 529 of Energy Independence & Security Act of 2007 creates a new Section 571 of the National Energy Conservation Policy Act that requires FERC to:

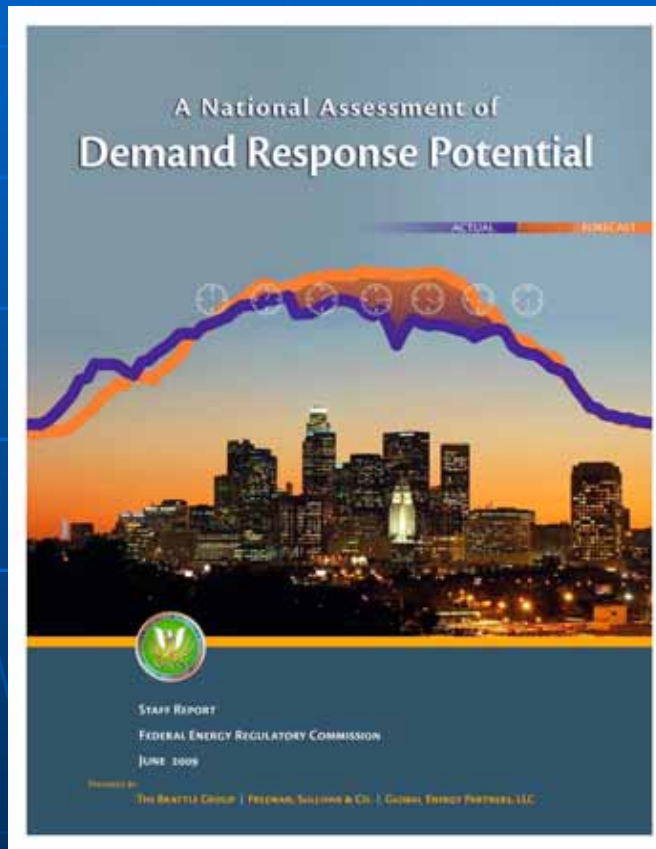
- Conduct a **National Assessment of Demand Response**
 - Due by June 19, 2009

- Develop a **National Action Plan on Demand Response**
 - Due by June 17, 2010

- With DOE, submit National Action Plan **Implementation Proposal** to Congress
 - Due by December 17, 2010

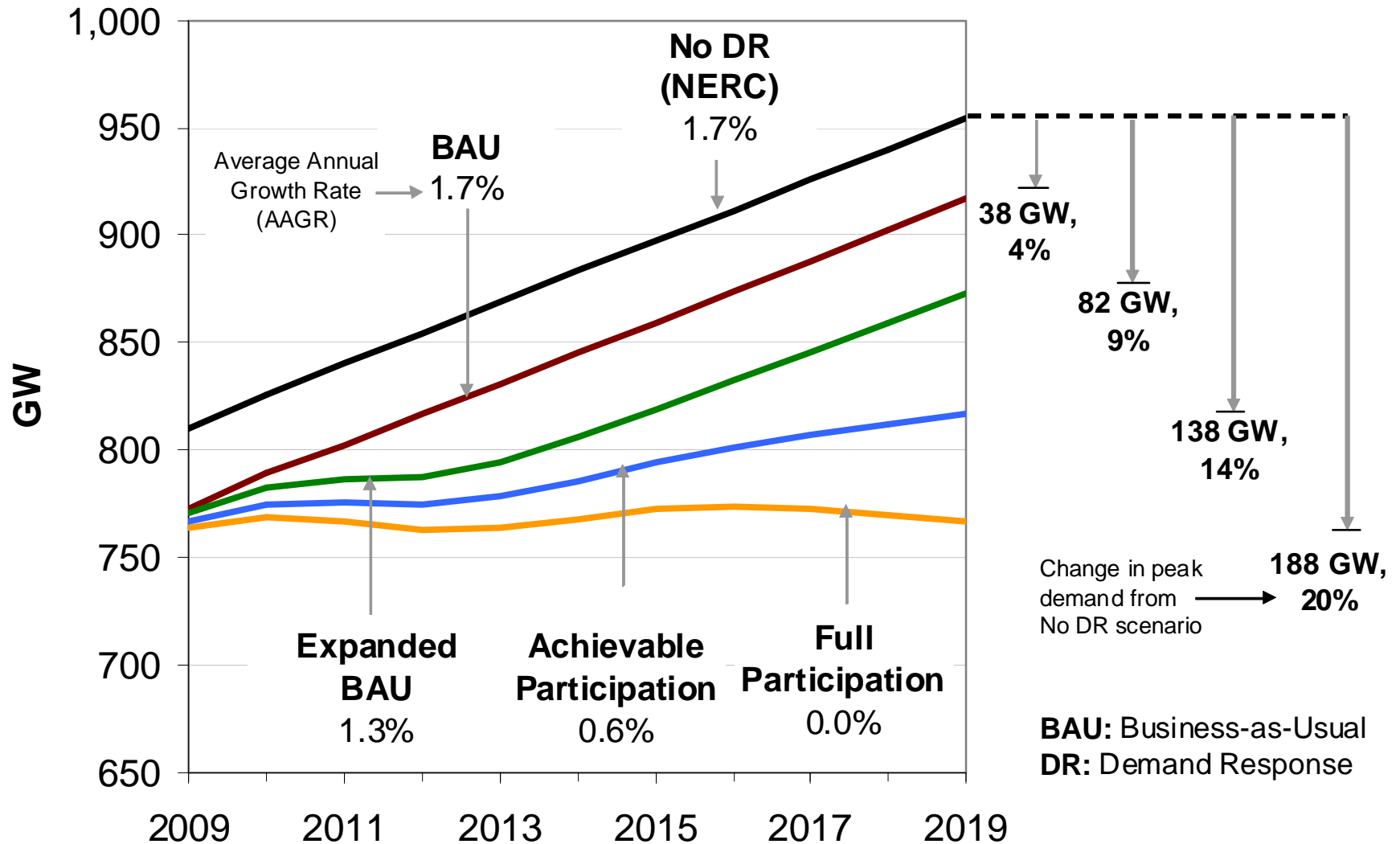
The author's views do not necessarily represent the views of the Federal Energy Regulatory Commission

National Assessment of Demand Response Potential

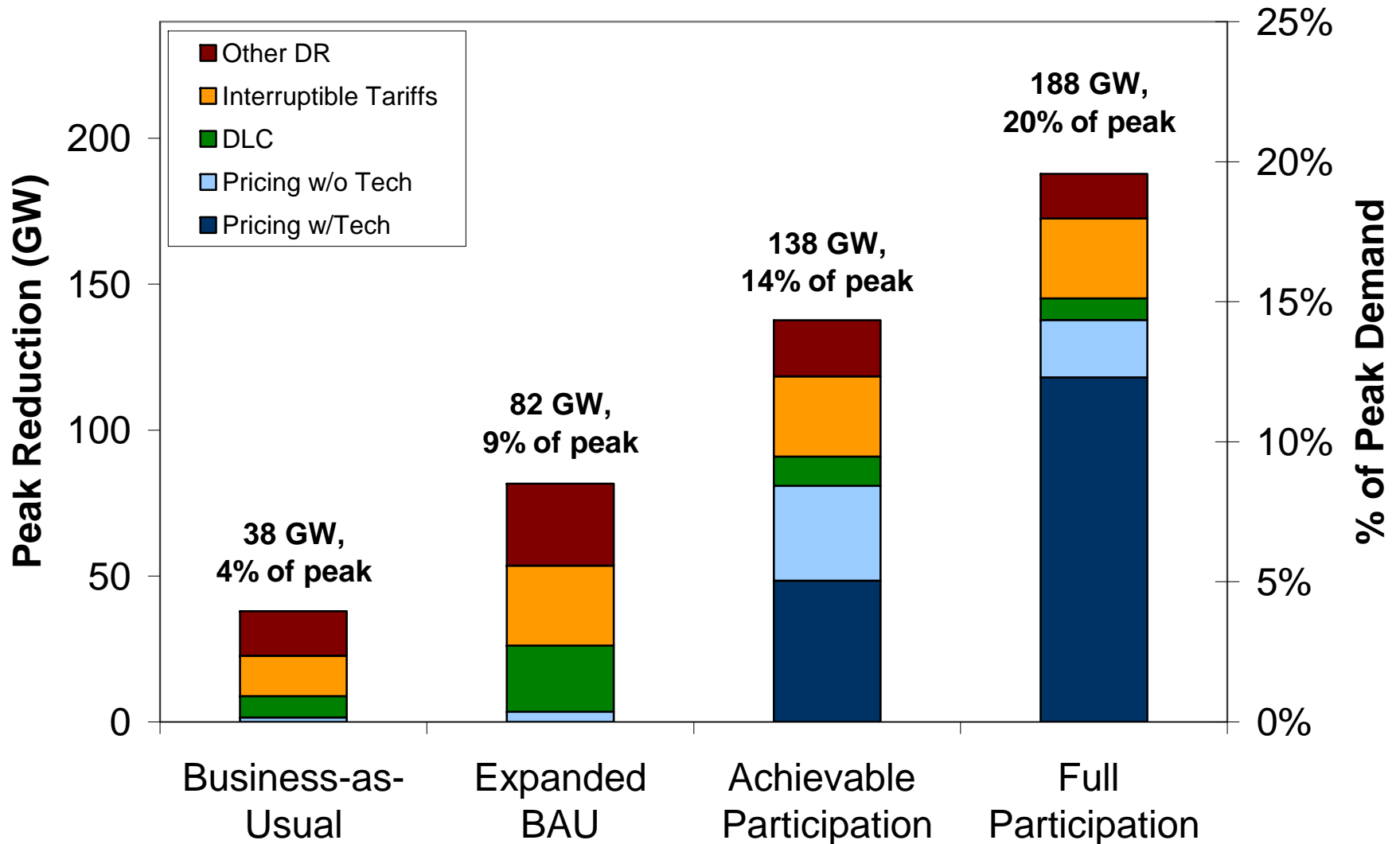


- Bottom-up, state-by-state analysis
- 15 pilot programs synthesized
- User-friendly spreadsheet model
- Review of barriers
- Recommendations to achieve potential

U.S. Peak Demand & NADRP



DR Potential by Program Type (2019)



Demand Response National Action Plan

Subsections 571(b) and 571(c) of the National Energy Conservation Policy Act require FERC to:

- **Develop a National Action Plan on Demand Response**
 - Solicit input and participation from broad range of stakeholders
 - Including industry, state utility commissioners, and non-governmental groups
 - Identify requirements for technical assistance to states
 - Identify requirements for a national communications program
 - Identify analytical tools and other support material

Demand Response National Action Plan Status

- Initial outreach conducted in 2008
- Detailed outreach with over 30 organizations conducted in 2009
- FERC Staff Discussion Draft released in Docket No. AD09-10 on October 28
- Technical conference to discuss the Discussion Draft is scheduled for November 19-20
- Written comments on the Discussion Draft are due by December 4, 2009

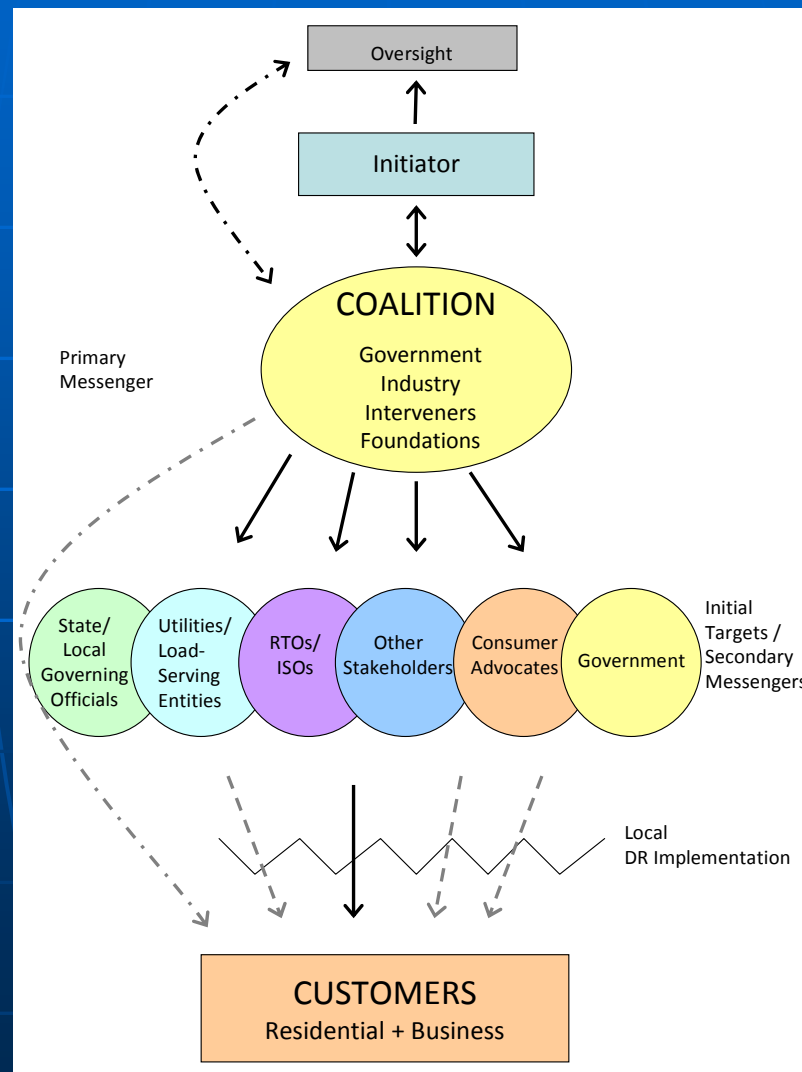
FERC Staff Discussion Draft

- Purpose – to seek comment from the public on the proposed content of a National Action Plan
- Describes possible activities that can be undertaken to maximize the amount of demand response resources that can be developed and deployed
- Contents –
 - Part 1: Objectives and Overarching Strategy
 - Part 2: Possible Strategies and Activities.

FERC Staff Discussion Draft

- The Discussion Draft envisions two simultaneous, compatible paths.
- Path 1:
 - Seek to identify communications strategies, technical assistance and tools to achieve deployment of the maximum price-responsive demand response identified in the Assessment
- Path 2:
 - Set forth communications strategies, technical assistance and tools to be used to develop and deploy emerging technologies and resources such as dispatchable and automated demand response that enable customers to respond to price or other signals

Overarching Strategy: Establish a National Coalition



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Element	Description
Coalition	A group of organizations representing different interests around demand response, including, but not limited to government, industry (utilities, load-serving entities, and other demand response providers, wholesalers, vendors), intervenors/consumer advocates, and non-profit foundations. Acts as a “service provider,” coordinating communication and training, distributing tools and resources, and allocating funding through grant-type mechanisms.
Initiator	Organization that “founds” the coalition or causes its creation, including recruiting founding coalition members. Allocates funding to the coalition. May be a member of the coalition.
Oversight	Organization that ensures the coalition is meeting its objectives and being fiscally responsible.
State/Local Governing Officials	Includes public utilities commissions, local governments, and cooperative boards.
Utilities/LSEs/Other demand response providers	Includes vertically integrated utilities, transmission or distribution owners, RTOs/ISOs, cooperatives, municipals, other demand response providers.
Other Stakeholders	Product and service providers (hardware, software, program administration/implementation, measurement & verification), intervenors (consumer advocates, consumer groups), foundations (non-profits, non-government organizations), and others.
Customers	Residential, small commercial and industrial, medium commercial and industrial, large commercial and industrial, government, and other segments.

Technical Assistance to States

Technical Assistance to States

Possible Elements

2.1.1 Establish a National Forum

2.1.2 Conduct Educational Sessions for Policymakers

**2.1.3 Conduct Communications Training for State and
Local Governing Officials**

2.1.4 Build a Panel of Demand Response Experts

2.1.5 Sponsor Technical Papers

2.1.6 Establish a Demand Response Assistance Program

2.1.7 Establish a Demand Response Grant Program

Support Materials

Support Materials

Possible Elements

2.3.1 Enhance or Develop Demand Response Tools and Methods

- Demand Response Estimation and Prediction Tools
- Cost effectiveness tools
- Measurement & Verification tools
- Cost recovery methods for enabling technology
- Industry-specific Decisions Support Tools
- Methodologies for Incorporating Demand Response in Dispatch, Ancillary services, transmission planning and Resource Planning
- Transparent Price Information

2.3.2 Specify Standards and Protocols for Demand Response

- Communication standards for consumer demand information
- Consumer data privacy standards
- Enhanced cyber security protection standards
- Tools and Standards to support the provision of ancillary services by demand resources
- Nationwide Plug-in Hybrid Electric Vehicles standards
- Standard demand response signals
- Common Specification for Price and Product Definition

Support Materials

Possible Elements

2.3.3 Provide Information to Design a Pilot Demand Response Program

2.3.4 Provide Guidelines on Dynamic Rate Design

2.3.5 Distribute Information and Case Studies via the Web

- Case studies of laws, regulations, tariffs
- Summaries of lessons learned
- Database of demand response programs

2.3.6 Provide Assistance to Customers with Multiple Building Facilities

National Communications Plan

Focus of the Communications Program

- Meet the core objective of *designing and identifying the requirements for implementation of a national communications program that includes broad-based customer education and support*
- Doing this in a way that takes into account the:
 - Diversity across states and regions in the nature of demand response programs currently offered
 - Extent to which local entities will have downstream receptivity to, interest in, or need for demand response programs / assistance
 - Diversity of stakeholder interests

Challenges the Program Has To Address

- That a national plan still must explicitly recognize the importance of local and regional differences and the implications of locally-directed implementation
- That key information about end customer awareness and initial reactions to -- let alone perceived needs and preferences -- regarding demand response is unknown

Staff Outreach Efforts Were Helpful But Left Open Questions

- Most stakeholders indicated support for a broad awareness campaign focused on end customers
 - “Educating” (“connect-the-dots” for) end customers about the issues that engender the need for demand response and how it can “help” both them (with direct benefits) and others (including environmentally
- But . . .
 - Should this effort focus on end customers or upstream audiences first?
 - Should it be top-down or bottom-up (i.e., grass roots)?
 - What level of education should be attempted?
 - How much should it be linked with related issues?

Key Goals of the Communications Program Outlined in the Discussion Draft

- Educate key market actors (including but not limited to local regulators, utilities and load-serving entities, and state legislators and their staffs), about the individual and social benefits of demand response, and encourage demand response implementation.
- Increase the understanding of all customers regarding the idea and benefits of demand response in addition to energy conservation and energy efficiency, and change the behavior of customers in terms of what times of day they use most of their energy, with the objective of realizing true response to peak demand.
- Use examples and commonly understood terms to which target audiences can relate.
- Have clearly defined objectives and measurable goals to facilitate program evaluation and accountability.

A Demonstration Program Model is Proposed

- Engage states or locales to serve as demonstration programs, which implement demand response programs and serve as potential model communications programs.
- Disseminate communications to the public, with a special focus on residential and small commercial customers, in the areas that have already implemented demand response demonstration programs.
- Spread communications to those areas that implement demand response programs in the near term.
- Eventually disseminate communications on a national scale as implementation becomes more widespread.

Implementing the Communications Programs

- Establish the basis and leadership for the program
- Develop insight that can drive the detailed components of the program
- Implementation

Establishing the Basis and Leadership for the Program

2.2.1 Develop a National Umbrella Communications Campaign

- Provide a consistent message framework that allows for specific tailoring to meet state's unique needs
- Create a clear message framework, customizable advertisements and message materials

2.2.1.1 Communicate as a Coalition

- Provide a credible campaign "voice" that comes from a diverse group of stakeholders and leaders
- Provide a clear sense across states, other stakeholders and partners about who is the go-to resource for demand response technical and communications assistance

Develop Insight to Support the Details of the Communications Program

2.2.1.2 Conduct Foundational Market Research

- Gain insights into perceptions, motivations and receptivity to particular demand response programs and messages

2.2.1.3 Develop Messages that Resonate

- Provide a consistent, effective message platform that advances the cause of reducing peak demand

2.2.1.5 Position Demand Response as a Component of Smart Energy Use Practices

- Introduce demand response in conjunction with energy efficiency and smart grid practices

2.2.1.6 Develop Consumer-Friendly Terminology for Demand Response

Implementation

2.2.1.7 Provide Communications Assistance to Stakeholders to Build Support for Demand Response

2.2.1.4 Provide A Communications Platform for Reaching Commercial and Industrial Customers

2.2.1.8 Distribute Toolkit Materials for Specific Utility or Load-Serving Entity Programs to Manage Their Own Campaigns

- Support programs that are not demonstration programs or that do not want direct assistance from the national coalition

2.2.1.9 Develop Corporate and Organizational Partnerships

2.2.2 Implement the Campaign Locally

- Adapt the umbrella campaign to states and localities to increase participation in their demand response programs

Key Takeaways Regarding the Communications Program

- The coalition is critical in providing effective communication program leadership
- The demonstration model is a key component that enables local implementation and adaptation
- Foundational customer research is essential to the effective development of the program

Request for Comment

- FERC staff requests comments on the following questions:
 - Are the three sets of possible strategies and activities described in the Discussion Draft appropriate and effective?
 - Should any of the possible activities described in the Discussion Draft not be part of the National Action Plan? Should any activities not listed be added to the National Action Plan?
 - Is the possible strategy of using a coalition to carry out the objectives discussed in Part 1 consistent with EISA?
 - How can such a coalition best facilitate the implementation of the National Action Plan?

Demand Response National Action Plan

Next Steps

- Publish for Comment Draft National Action Plan
- Publish Final National Action Plan by June 2010
- Prepare Implementation Proposal for Congress with DOE by December 2010

Questions?

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