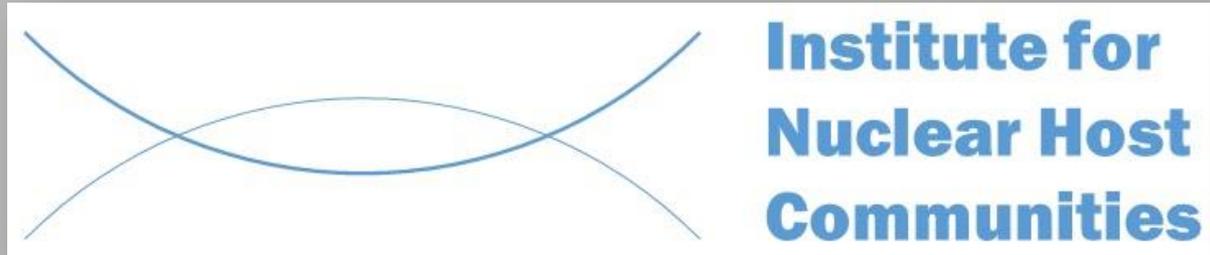


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**June 2, 2016**

**Pilgrim Closure Planning Support:  
Phase II Final Report**



Prepared by the Institute for Nuclear Host Communities

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# About the Presenters

## **Jennifer Stromsten, INHC Program Director**

- Regional and state response to VY closure – economic assessment, planning and mitigation losses
- Focused on opportunities to improve closure outcomes for communities through state and federal policy
- Networking with other closure communities and interested parties
- Teach nuclear closure course at UMass Honors College with Professor John Mullin & Jonathan Cooper

## **Jonathan Cooper, INHC Research Director**

- Author of Pilgrim Station socioeconomic impact study
  - Baseline economic research on all closed and operating U.S. Plants
  - Conducts analysis of policies shaping closure outcomes in US and around the world, identifying best practices
  - Building awareness of closure impacts – conferences, virtual platforms, teaching
  - Developed curriculum for, teach nuclear closure course for UMass Honors College
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# Nuclear Plant Closure: Background

- More closures happening as plants age and economics shift
  - Effects underestimated – quiet economic giants, distributed across U.S.
  - Similar to other closures, generally more predictable
  - Closure activity duration and complexity like BRAC and Brownfields
  - Unique regulatory factors - decommissioning (NRC) & Spent Fuel (DOE)
  - No program or policy to support host community's socio-economic needs
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# Phase I

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# Plymouth & Old Colony: Proactive Approach to Closure

Early action provides benefits

- **Anticipate** changes affecting host communities
  - Identify opportunities to **mitigate**
  - Develop resources and political will to **act** effectively
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# Spring-Summer 2015

## *“The Pilgrim Nuclear Power Station Study”*

- Published – the UMass Center for Economic Development, Professor John Mullin & Jonathan Cooper
  - Presentation to Plymouth Selectboard May 19
  - Presentation to Old Colony Regional Planning Annual Board Meeting
-

# Economic Impacts

UMassAmherst

## Major Findings: Plymouth & Barnstable Counties

- If plant operation produces...
  - Approximately 1,200 jobs
  - Approximately \$14 million in municipal taxes
  - Approximately \$107 million in wages and benefits
  - Approximately \$148 million in non-payroll spending
  
- Then plant closure means...
  - Workforce losses beyond the power plant
  - Reductions to municipal finances
  - Household spending impacts in non-nuclear homes
  - Revenue impacts in several industries in the economy

# Driving Factors

UMassAmherst

## Nuclear Plant Closure Characteristics

- Location
  - Out of the way
- Workforce
  - Highly specialized
- Cleanup
  - Many variables
- Assistance
  - No direct allies
- **Spent Fuel**
  - Policy failure
  - Was never part of the deal
  - Now a matter for the courts



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# Key Recommendations

## **Build Knowledge:**

- Develop detailed assessments of socio-economic benefits
- Stay informed of regulatory and legal developments
- Match existing best practices for plant closure to Pilgrim Station specifics

## **Build Support:**

- Create and maintain a non-adversarial process
- Identify key stakeholders to determine roles
- Develop relationships with relevant state and federal agencies

## **Build Momentum:**

- Work with legislators to expand energy transition planning
  - Focus development planning off-site
  - Promote stability in plant-based revenue
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# Key Recommendations

## **Build Knowledge:**

- Develop detailed assessments of socio-economic benefits
- ✓ Stay informed of regulatory and legal developments
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  - ✓ Focus development planning off-site
  - ✓ Promote stability in plant-based revenue
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# Phase II

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# Phase II

## **“CAP” Citizens Advisory Panel**

VY “NDCAP”– connect,  
observe, network, learn

Best Practices for Pilgrim  
“CAP – adaptations from  
precedent, partners,  
resources

## **Response to Changing Conditions and Opportunities**

Pilgrim Closure timeline

Activity at Federal Level

- NRC Rulemaking on decommissioning
- DOE Spent Fuel process restarted

## **Capacity Building Phase 1 Follow up**

Building knowledge, support  
& momentum

- Education
  - Relationships
  - Research
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## **“CAP” Citizens Advisory Panel**

- 1. SLOW DOWN and use the lead time to get what you need**
  - 2. LEARN MORE from past closures, including problems**
  - 3. PREP Legislation for 2017 and align support including Entergy**
  - 4. TASK OUT additional needs**
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## Response to Changing Conditions & Opportunities

*Fall 2015 – Spring 2016: Closure data wavering between 2032 – 2019 – 2016 – 2019*

*Thanksgiving 2015: Nuclear Regulatory Commission announcement of new “Rulemaking” affecting decommissioning*

*December 2015: Department of Energy announcement of fuel transport & removal efforts (after 7 year delay)*

*Spring 2016: Economic Development Administration is including Nuclear Host Communities in its POWER funding program*

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## Follow up from Phase I: Capacity Building

### EDUCATION

Direct consultation and support for local and regional officials during these early phases of assessment and planning

### RELATIONSHIPS

Creating a network of direct contacts so Plymouth and Old Colony can directly access experts and experience

### RESEARCH

Knowledge-building for officials and leadership, stakeholders and public, objective information to improve socioeconomic outcomes

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# EDUCATION

- *UMass Conference on Nuclear Closures*
  - *In-person and telephone Consultation with economic and planning staff*
  - *Presentations to stakeholder groups*
  - *Policy Briefs*
  - *Next Steps: Public information materials and processes expanded*
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# **EDUCATION: Objectives**

- Focus Attention
  - Comprehension – Building Common Baseline
  - Prep for Productive Public Engagement
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# RELATIONSHIPS

- *Networking with other hosts - UMass AEHS Conference Fall 2016*
  - *Coordinating at multiple scales – local, regional, state, federal*
  - *Plymouth Delegation trip to Southern VT*
  - *Individual resources – experts and experience*
  - *Host community network – Leadership & Critical Mass*
  - *Forging Connections with the Plant – Entergy and the NDO*
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# Relationships: Objectives

- Accelerate Learning
  - Establish Resources for Next Phases
  - Increase Leverage and Advocacy
  - Improve Outcomes
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# RESEARCH

- *Provide key stakeholders a basic overview – from acronyms & terminology to specific issues*
  - *Identifying reliable sources for information going forward – for instance radiological health and safety*
  - *Policy Briefs, such as economic mitigation precedents – the VY “MOU” settlement money and other*
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# **RESEARCH: Objectives**

- Quality Public Processes and Education
  - Prepare for Closure & Decommissioning Activities
  - Trusted Information Sources for Key Stakeholders
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# **Deliverable:**

## **Community Guidebook**

### ***Economic Study + Report + Briefs***

- Alphabet Soup
  - Citizen's Advisory Panels
  - Closure and Decommissioning Timelines
  - Pilgrim Station Decommissioning Cost Estimates
  - Pilgrim Station Decommissioning Trust Fund
  - Site Release Prior to Decommissioning
  - MOU between the NRC and EPA
  - Closures and Negotiations
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# Recommendations

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# **Recommendations for 2016-2017**

**A Citizens Advisory Panel that works for you**

**Ongoing Education and Information Building (Public)**

**Focus on Desired Outcomes (and how to get them)**

**Leadership and Support in Key Areas**

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# Recommendations for 2016-2017

## **A Citizens Advisory Panel that works for you**

- *Best practices and mistakes from past*
- *Slow down - work to 2019 planning horizon*
- *Engineer to goals: public education and accountability, site process transparency, coordination across scales and agencies*
- *Identify what the CAP will not do (socioeconomic, decision-making)*

## **Ongoing Education and Information Building**

## **Focus on Desired Outcomes**

## **Leadership and Support in Key Areas**

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# Recommendations for 2016-2017

**A Citizens Advisory Panel that works for you**

**Ongoing Education and Information Building**

- *The Community Guidebook and VY-based sources of general information*
- *Keep “Translating” for stakeholders*
- *Continued use of press and public meetings*
- *Consider an information officer, and web site*

**Focus on Desired Outcomes**

**Leadership and Support in Key Areas**

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# Recommendations for 2016-2017

**A Citizens Advisory Panel that works for you**

**Ongoing Education and Information Building**

## **Focus on Desired Outcomes**

- *Phase I Economic Study – outlines needs*
- *Seek resources to plan and implement*
- *Environmental and Safety will be central to all state and federal actions*
- *Other outcomes require local / regional leadership*

**Leadership and Support in Key Areas**

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# Recommendations for 2016-2017

**A Citizens Advisory Panel that works for you**

**Ongoing Education and Information Building**

**Focus on Desired Outcomes**

## **Leadership and Support in Key Areas**

- *Lack of coordination and resources is default*
  - *Enshrine your near, medium & long term goals in institutions now*
  - *Staff up, task out*
  - *Independent research, technical advice*
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# Final Thoughts

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# Outcomes & Timeframes

The closure and decommissioning process was designed to produce a clean site. Those processes are difficult to influence, and demanding. You must respond both to urgent and immediate concerns, and decisions with intergenerational consequences.

**In terms of Socioeconomic outcomes, keep striving to maintain that balance between near-term needs and long-term strategies: e.g. local** comprehensive site and tax planning, **regional** economic mitigation and opportunities, and **national** policy frameworks that dictate your options, like spent fuel and NRC rules.

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