PRESIDENTIAL CANDIDATES POSITIONS ON NUCLEAR POWER

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Secretary of Energy Where we are now...

- Over the last twenty years, nuclear power has contributed to nearly 20 percent of the electricity generated in the US
- Nuclear energy is the nation's largest contributor of carbon-free electricity
- Under the current Clean Power Plan, the goal is to reduce carbon dioxide emissions by 32 percent below 2005 levels (all before 2030)
- The Paris Agreement and Mission Innovation have shown the interest for low-carbon technologies

Secretary of Energy Budget 2017 Requests

- \$994M for the Office of Nuclear Energy's research and development programs
- \$804M in support of Mission Innovation
- \$102M to support DOE nuclear test reactors at the Idaho National Laboratory
- \$75M for sustainment of unique nuclear and radiological R&D capabilities at the Materials and Fuels Complex at INL

Secretary of Energy Budget 2017 Requests

- \$76.3M for integrated waste management system activities
- \$74.3M for Used Nuclear Fuel Disposition R&D
- Budget will carry forward consent-based siting, consolidated interim storage, and disposal activities

Secretary of Energy Where we are going...

- Current Secretary of Energy, Dr. Moniz, has established a Task Force of the Secretary of Energy Advisory Board (SEAB)
- This Task Force will focus on the future of nuclear power
- According to Secretary Moniz, the Task Force will be charged to "develop a report that will describe the landscape to go from today's reliance largely on light water reactors to a situation from 2030 to 2050 where one or many nuclear technologies have reached technical and commercial maturity and are deploying at a rate that could contribute carbon free nuclear power for 20 percent of global electricity generation".

2016 Presidential Candidates' View on Energy and Energy Related Matters

- The policy positions of top candidates, Clinton and Trump will greatly impact the future of US Energy policy
- These policies include views on climate change, energy, education, nuclear power, and global challenges

Climate Change Clinton

- Believes that climate change is an urgent threat and is already greatly impacted the US and the world
- Wants to slash greenhouse gas pollution
- Goal is to make the US the clean energy superpower within ten years of her taking office

Climate Change Clinton

- Has three goals to make US a clean energy superpower:
 - 1) US to generate half of our electricity from clean sources (half a billion solar panels installed within four years)
 - 2) Cut energy waste in US by a third while making our manufacturing the cleanest and most efficient energy in the world
 - 3) Reduce US oil consumption by a third (done through cleaner fuels and more efficient products)

Climate Change Clinton

- She will launch a \$60 billion Clean Energy Challenge to partner with those entities across the US that are willing to lead in clean energy
- Will build on clean energy tax initiatives

Climate Change Trump

- Believes more investigation should be done in the field of climate change
- Wants US to focus on developing energy sources and power production to alleviate the need for dependence on fossil fuels

Energy Clinton

- In addition to the items discussed in the Climate Change section, Clinton wants to deliver on President Obama's message at the Paris Climate conference
- Does not want to rely on climate deniers in Congress to pass new legislation
- Wants to defend, implement, and extend current pollution and efficiency standards including the implementation of the current Clean Power Plan

Energy Clinton

- Ensure fossil fuel production is safe and responsible
- Reform leasing and expand clean energy production on public lands and waters tenfold (within a decade)
- Cut billions of "wasteful" tax subsidies of the oil and gas companies
- Cut methane emissions across the economy (add standards for reducing leaks)
- Revitalize coal communities by supporting locally driven priorities

Energy Trump

- US goal should be to achieve energy independence as soon as possible
- Energy independence will come from wind, solar, nuclear, and bio-fuels
- Market system will allow consumers to determine best sources of energy for consumption
- Believes that if the US, Canada, and Mexico are the key energy producers in the world, we will be safer and more productive

Nuclear Power Clinton

- Will work to ensure that the climate benefits of our existing nuclear power plants are safe to operate
- Will increase investment in the research, development, and deployment of advanced nuclear power
- Invest in security of our nuclear materials
- Improve coordination between federal, state, and local authorities
- Reduce amount of nuclear material worldwide

Nuclear Energy Trump

- Valuable energy source for US
- Make nuclear power safer as it is a great investment
- Key part of energy independence for US

Major Energy Policy Issues For Next President

- Carbon Policy Energy
- Infrastructure
- Policy of Science/Politics

US Energy Portfolio

Potential Impact of US Energy Policy includes:

- -Economic
- -Environmental
- -Foreign Policy

Global Challenges

- Clinton focuses policy on climate change and sites it as a key issue globally
- Differs from Trump's key pillar of energy independence

Imperativeness of the Nuclear Fleet

- America developed the nuclear technology
- Global leader for six decades
- Losing that global leadership position rapidly
 - Political and policy driven, not technology driven
- What does that mean to the US
 - 1. Loss of seat at table or meaningful voice in global nuclear activities
 - 2. Loss of overview of regulatory and safety issues for immature or emerging nuclear nations
 - 3. Loss of oversight and control of nuclear proliferation issues
 - 4. Loss of economic benefits to US nuclear suppliers
 - 5. Loss of basis for research and development for new and advanced reactors

Imperativeness of the Nuclear Fleet

- What does this mean to the globe?
 - Loss of US leadership and regulation and technology transfer
 - 2. Loss of US experienced and competent supply chain