BPU ENERGY MASTER PLAN SEPT 14, 2018 “Reducing Energy Consumption” – meeting notes ver 1.5  
(Names and Organizations are likely misspelled)

ANNEX CONF ROOM #6: Signs on the walls: ‘tag the NJBPU on social media #EMP2019 “

“TEAM KILOWATT” - the slogan of members of the NJ Energy Master Plan Committee

Laura Kelicetti NJ div of rate council - represents ratepayers – submitted written comments.

* Avoid unexpected expenses. Incremental electric loads from electric vehicle charging, as well as building heating should be directed to off-peak hours.
* independent evaluator should study the benefits & tradeoffs, & take into account ratepayers as a whole.
* Avoid overlap with DEP.
* Technology: load control with smart thermostats, chilled storage, hot water tank storage,...
* Want private contractors to take lead in many areas
* Zoning standards: require builders to provide solar ready roofs and wiring provisions.

Core Metrics: Franklin Newbauer

* Expand carbon pricing to beyond electric to other sectors; use west coast as examples.
* Develop forecasts; review periodically; avoid improvised solutions; in the past, recession affected plans.
* Plan for households affected by multiple programs. Avoid double counting
* Need reliable energy planning process; esp. transparency.
* Examine best practices: for example, NEET was presented to Corzine. It is a judgement call on whether applies to NJ
* Examples: Demand response; benchmark buildings; …put price on Carbon (using RGGI)

UU CLEAN ACTION: Nancy Giriffiths

* PROBLEM: Societal Benefit charge: the benefits are being given to cover shortages in other areas. Everyone pays; this transfers wealth from poor to wealthy
* Need to help improve energy efficiencies of lower income people as well as the well off.
* Focus on disadvantaged communities
* Improve NJTransit. Reward disadvantaged communities as well as wealthy communities.

Ann Marie Carocho, conservation and clean energy for NJ Nat Gas.

* Noted utilities already use the “kilowatt” slogan! NJNat Gas Conservation program first started in 1996.
* They work collaboratively with NJ Clean/green programs
* $159 million invested over the years. Need diverse energy saving programs for all customers and moderate-income customers, renters, and seniors
* Commercial customers: identify by industry segment; make sure all segments are aware of the programs.
* Use superb customers to showoff to others; Use cost/benefit analysis . include emerging technologoies, esp when considering new codes and standards. Several new technologies: “gas heat pump” technology,….
* NJNatural Gas audits have shown that 30% of the customers cannot be helped because of structural and safety problems with the premises

RICHARD LAWTON : Sustainable Business Council

* Businesses are integrating sustainability into business and supply chains.
* require a 30% reduction in electric & natural gas by 2030
* treat large commercial customers differently: Use property tax incentive; use energy star program to do energy audits of the buildings
* Improve green building standards and provide funding for training the building operators
* Give building managers access to monthly data (if can’t measure, can’t manage)
* Establish data transparency for energy data
* Funds for energy; efficiency purposes should NOT be diverted for other purposes

Scott Fischer: energy efficiency company working on energy efficiency improvements.:

* keep funds from diversion!
* Look at problems in making businesses and homeowner energy efficient:
* Make energy efficiency more mainstream, and well known by the pubic

Wayne Matheo: Building Council; acting Executive Director

* The best Killowatt hour is the one you don’t use.
* Societal benefit charge must be sacrosanct
* code enforcement officers need more training. There is a huge inconsistency across projects.
* clean energy programs need to be more user friendly; A personal example: one customer took a lot of handholding – new air conditioning for this customer would not have gotten done without his help.
* RESIDENTIAL: There is a problem when the same organizations doing audits are then doing the work. An independent audit makes more sense.
* Make sliding scale for residential improvements: cheaper for low income tied to COAH, or existing programs
* Adopt international green construction code. Start with buildings where NJ state is involved or owns. Add 3rd party verification
* Data, from existing state buildings over 15,000 sq feet, shows that efficiency of the people rises by 10% when sustainability practices are used in the building.

Joe Cardo, Chief Regulatory Officer of PSE&G

* Must switch from selling as much gas or electric as possible to one of saving and spending less. Current business model discourages efficiency. Energy efficiency costs less than any other source of power.
* Lowered emissions means lower illness
* The customer contacts of PSE&G makes them uniquely positioned to implement energy efficiency programs.
* Invest in universal EV charging infrastructure.
* Need to invest in upgrading electric facilities.

Doug? Chuck? Exec. Director of “Environment NJ” & Graystone Power & Member of Jersey Renews Council..

* It is important to acknowledge the 2007 global warming response act: 80% reduction
* One BPU challenge: no control of the state budget; the result is a continual raid of the clean energy fund

John St Cloud, NJ PACE

* Recommends that 50% of effort should be spent on energy efficiency; 25% on solar,…
* There are many ways to finance solar; by comparison, there are few ways to finance efficiency upgrades.
* Use special assessments by city – to make special improvements with 30 year payoffs.
* It is estimated that 50% of all US energy use is wasted.
* In new construction, green building elements might be 30 % of total cost
* $1million investment provides 15 jobs.

William Atkinson, Princeton Student Climate Activism.

* In NJ: unchecked sea level rise would cause 100s of thousands of homeowners to relocate by 2100
* …

Dave Pringle, Clean Water Action (100K members in NJ)

* Reducing energy is critical to meet 2050 goal.
* Demand response is important, but CONSERVATION is equal or greater importance
* Conservation is the evaluation and real time control of power consumption. We need to prioritize
* CONSERVATION gets a bad rep, yet is of 1st importance. Examples: mandatory recycling; when to turn off light; or turn down heat.
* We must commit to no new nuclear in the interim. Retire most dangerous generators; esp first retire the dirtiest
* SOLID WASTE: have done a better job than we have done on the energy side
* Site Land Use has a big impact: How house is sited on land has a huge impact on amount of energy. Factors include trees which provide shade; south facing windows, tiles, etc

Maury Levins; a law firm representing retail suppliers

* Need energy efficiency portfolio standards by 2030
* Retail Suppliers: smart meters, AMI – retail suppliers have great software. Need smart electric meters.
* Retail suppliers of clean energy can help get to the goal

Dennis Hart, Exec. Dir of Chemistry Council of NJ (Chemical manufacturing, refining etc.)

* Biggest problem: energy costs are one of the top concerns of NJ industrial manufacturing. Energy is 45% higher than other states
* With nuclear subsidy bill, etc. cost in NJ will continue higher, and make this unsustainable!
* Must reduce cost of doing business in NJ
* Companies that have implemented energy efficiency programs have reduced their energy use by 50%

Henry, League of Conservation Voters:

* Some low income people are spending 20% of income on their energy inefficient homes,…
* Clean energy funds should be used for training, etc

Jeff Tittle , Sierra Club, Dir., NJ Chapter

* Sierra Club believes the best pathway is to first improve energy efficiency
* Up to now, the clean energy fund has been used as slush fund for near term emergencies i.e. for lights in in the Trenton Statehouse. NJ spends more and gets the least return. We need to stop raiding these funds : we took $1.6Billion, which has cost 4000 jobs per year for last 9 years. We train people to do HVAC work, yet businesses are dropping people
* Energy efficiency is critical: lowers peak demand and helps winter peak demand that would otherwise be filled by generation using dirty fuel
* 30% of energy can be reduced in the house- -this avoids building new power plants
* We need to move forward on energy efficiency. We have been slipping on energy efficiency for years, compared to other states.
* Adopt international green building code
* Implement LEED requirements; Level 3 should be MANDATORY
* Every state-funded building should be LEED-compliant
* Upgrade to an electrical DC Grid
* Provide REAL rebates and education the consumers. (From personal experience): A furnace installer said a rebate was not available – when challenged he said he just doesn’t want to do the work
* The more we educate, it becomes harder for others to steal the money
* We need to ensure BPU works aggressively - not just Trenton we need 30%energy efficiency improvement by 2030!

JEFFREY BRANT Lab Kelly Investment company

* Topic: existing buildings. Use clean energy programs - to apply $ to its best use.
* By contrast: SREC: 22 cent/kwh flat every year
* A “Duck” curve sees a scramble of inefficient generators to provide peak demand

GAYLORD OLSON Temple Univ

* ROOFTOP SOLAR: Net zero buildings (enough solar panels on roof to supply for the full year; but using grid for storage).
  + This appears to be inefficient use of consumer’s capital. The smaller rooftop solar panels is 2.8X the cost (per output power) compared to large solar arrays which might be 100 miles from home. Community SOLAR appears to be the way to go
  + For the smaller rooftops, trees, and their shade, appears to be more economical.
* HEATING/COOLING: More efficient ways to heat and cool is appearing with German and Scandinavian companies:

Example: use heat pumps. (NY state is looking at subsidies). The air an be the heat source/sink. But air is less efficient on hottest and cold days. Rather, for higher higher initial cost, but lower cost in the long term are ideas like “Thermselect” for multi-source (hybrid) heat pumps. <https://www.thermselect.de/> or <http://www.smartheat.de> (use Google Chrome for a translation)

JEFF SHLAGEL consultant for Schneider Electric (owner of Square D breakers)

* Energy efficiency reduces cost, and also reduces supply chain costs to Schneider Electric
* Financial investment decisions are based on financial returns. This requires market and regulatory certainty and resource standards.

Ray Montolo, Pres. and CEO of Consolidated Energy Design

* We incentify kwh, but not KW reduction!!.
* We need to change this, just as CA and NY has undergone fundamental change:

(Left prior to the last 2 or 3 speakers)

Steve Miller, Sierra Club Jersey Shore Group Climate Chair