

## Docket 4600 Stakeholder Meeting Notes – July 12, 2016

### **Welcome and introductions**

- Wilson-Frias introduced PUC staff and commissioners to the group.
- Noting that Commissioner Gold was in attendance, Wilson-Frias reminded the group that the conversations should still be free-flowing. Presence (and participation) of PUC staff and commissioners shouldn't be taken to indicate preferences for any position.

### **Status of PUC RFP for Consultant Services**

- The PUC will be finalizing a contract with a consultant to facilitate the stakeholder process in the next couple of weeks.
- PUC staff will have a kick-off meeting with that consultant in August.

### **Possible dates for September meeting**

- PUC staff has suggested September 19 or 23 for a full-day meeting led by the consultant.
- Stakeholders should look for a Doodle poll to provide their availability.

### **Roll call**

- A copy of the sign-in sheet is attached to this document.
- Missing Parties: Northeast Clean Energy Council

### **Purpose of meeting**

- The purpose of the meeting is to start a conversation to identify programs, policies, costs, benefits, and possible tests to measure each.
- This is a major component of the overall review in the docket.
- The PUC is trying to keep things moving in the docket while we wait for the consultant to join.
- Two suggested readings for the discussion today:
  - The South Carolina report: <https://dms.psc.sc.gov/Attachments/Matter/d0e0a657-e5a0-4554-b1a9-c330e62ff361>
  - National Grid's draft framework: <http://www.ripuc.org/eventsactions/docket/4600-NGrid-Spreadsheet.xlsx>
- The spreadsheet, started by National Grid, was just to provide a single point of reference to start. The PUC is looking for stakeholders to expand the rows and columns with their inputs on policies, programs, costs, benefits, etc.
- Stakeholders should also keep sending suggested material to Cindy, and we'll get them posted for future meetings, with better notice

### **National Grid explanation of example framework (linked above)**

#### **Tim Roughan:**

- This is a non-exhaustive list of the various attributes that could be looked at in this docket
- The boxes on the right (columns of Energy Efficiency, System Reliability Procurement, etc.) are not there to put values in at this point, but as a place to score whether or not (yes/no) the program can affect a particular cost driver (the rows).
- The framework will help identify how programs match up today and maybe identify gaps to think through.

#### **Jeremy Newberger:**

- In the chart, the "cost driver" column is the thing that causes changes in a certain attribute. For example, the cost driver "coincident peak demand" can "drive" the construction of new capacity. So, if you could do something to affect peak demand, you will be doing something that may create capacity costs or benefits.
- Many of the elements in the benefit/cost column are defined in better detail in the Energy Efficiency filings (e.g. [Docket 4580 Plan filing Attachment 4 starting on p. 169](#))

### Bulk System Level

- Generation capacity costs ([FCM](#)) – the cost of needing or benefit of avoiding/deferring the procurement of generation facilities and resources
- Energy supply costs ([LMP](#)) – the cost of purchasing or benefit of avoiding energy purchases to consumers
- Transmission capacity infrastructure costs -- the cost of needing or benefit of avoiding/deferring the procurement of transmission facilities and resources
- [Ancillary services costs](#) – the cost of certain services (including rapid start generation and frequency regulation) provided by certain resources to the grid
- Energy and Capacity Demand Reduction Induced Price Effects (DRIPE) – price effects caused by a decrease in demand (e.g. cause by energy efficiency); lower marginal prices and capital investment, but also structural market changes; over time, markets adjust to the changes and thus DRIPE is a temporary benefit (diminishing with time)
- Greenhouse gas emissions costs – [Regional Greenhouse Gas Initiative](#) is a carbon reduction programs that adds cost to fossil fuel generation; when load is reduced, the cost of compliance with the program is reduced. This is included in the [Energy Efficiency program Avoided Energy Supply Cost](#). There are other ways to monetize greenhouse gases.
- [Criteria air pollutant](#) emissions costs – similar to GHG costs, this is an avoided cost, currently counted in combined heat and power (CHP) projects only ([see § 39-1-27.7\(c\)\(6\)\(iii\)\(D\)](#))
- Non-energy costs/benefits (e.g. economic development) – two part: 1. When money isn't spent on bulk system purchases, consumers have money to spend on other goods that can create a positive effect on the economy. 2. When energy is purchased, much of the money for that commodity goes out of state; money spent in state on services that displace the commodity purchases (e.g. energy efficiency to replace natural gas purchases) has a positive effect on the local economy
- Distribution System Level
  - Distribution capacity costs – the cost of needing or benefit of avoiding/deferring the procurement of distribution investment
  - Distribution operation and maintenance costs -- the cost of needing or benefit of avoiding operation and maintenance services on the distribution system
  - Ancillary services costs – cost of services like [voltage support, reactive power](#), reliability enhancement, etc.
  - Distribution system reliability loss or gain: change in reliability caused by some action; something to discuss in terms of whether or how it can be monetized, but it is certain consumers value reliability
  - Distribution safety loss or gain – similar to reliability; there is value to safety and safety risk; also there are costs to programs that provide safety and reliability
  - Program administrative costs – changes in programs can increase or decrease the cost to run the programs
  - Non-energy costs and benefits – similar to above for bulk system level
- Customer Level
  - Program participant costs and benefits – costs and benefits that accrue only to participants, like co-payments costs for certain products or services
  - Program non-participant costs and benefits – costs and benefits that accrue to a ratepayer regardless of enrollment in a particular (productivity effects, health and safety effects, etc.)

- Other (not listed in the original version of the spreadsheet)
- **Costs and benefits to oil, natural gas, water, wastewater sectors**

## Discussion

### Todd:

- The PUC wants to encourage some research and discussion to begin now, before the consultant arrives. The process intends to have stakeholders be the primary source of identifying costs, benefits, etc.
- The group can, and should, think beyond just the utility. Can look at benefits to business of developers, society, etc.
- PUC staff has been looking at ways to slice policies up. There are policies with:
  - clear targets (e.g. [RES](#), [RE Growth MW](#));
  - general direction for which targets are developed by stakeholders and approved at the PUC (e.g. [Energy Efficiency](#), [service quality](#));
  - without clear targets enumerated or set (e.g., low and least-cost procurement (“[activities that have as common purpose meeting electrical and natural gas energy needs in Rhode Island, in a manner that is optimally cost-effective, reliable, prudent and environmentally responsible](#)”), [System Reliability Procurement](#) (docket [here](#)), [competitive markets](#)), but that are part of what is considered in decision-making.
- Statutory targets are our constraints; everything else represents variable we can change to achieve state policy at the least-cost.
- Part of the process is to identify state policies, and another part is to identify and categorize how these policies are implemented. It would be good to start compiling that now for the consultant.
- “Policy” is a broad term in this docket. Rates should be considered a policy. E.g., coincident peak demand is a benefit/cost driver for multiple benefit/cost categories across multiple system levels. But, the allocation and collection of those costs is another policy decision—coincident peak is not necessarily in allocation and rates.
- We need to identify all of these policies and how they affect the company’s structure and the different structures of the stakeholders.
- We should also be thinking about [cost tests](#), and this was something about the [South Carolina report](#) that we liked. The last few columns on the right of Table 1 on page 8 identify different cost tests being used in some example jurisdictions. The PUC thinks it will be useful to think about the tests that will be used to evaluate programs and policies.
- PUC thinks that both cost-benefit tests and cost-of-service tests will be important to identify least-cost procurement strategies and costs shifts.
- We also intend for the stakeholders to play an important role in identifying the connections between policies and programs. We need to learn how money is moving around among these programs and policies (e.g. [RGGI compliance dollars help fund EE programs](#), this drives down RGGI compliance costs, and in turn this drives down RGGI compliance dollars to fund EE programs).
- Consultant will have good knowledge of New England and RI, but the stakeholders will be key in expeditiously identifying these relationships.
- We want stakeholders to talk about what they like and don’t like about National Grid’s [draft framework](#), and also to start expanding it vertically (more costs/benefits) and horizontally (more programs and policies)
- **PUC would start by adding LIHEAP and the enhancement fund as a policy not included in the chart.**

### Cindy

- [Be aware of new policies.](#)

- It's important to identify policy conflicts
- It's not just who pays for what, but also how money is moving around between programs
- The more we discuss now, the better the more robust the recommendations will be

#### **Todd**

- No need to limit the expansion of chart to what is currently law.
- Also add programs that should exist or is implied by state policy
- E.g. societal benefits, more detailed economic benefits, etc.

#### **Tim Roughan**

- [Total Resources Costs](#) test is critical for EE evaluation, but it is not what's done for distribution and transmission planning, and that a disconnect we'll face when looking at these cost/benefit drivers
- Another challenge is [RI is restructured](#), and some of these costs and benefits are not part of the utility business. We need to remember the different players in RI's structure, and figure out where the different cost/benefit drivers fit in that structure so we know where we need to go if we identify something worth changing

#### **Abigail Anthony**

- Are the costs/benefit categories and drivers in the [draft framework](#) quantifiable and able to be monetized, or are some items not currently able to be monetized?
- Are there things that aren't included because they can't be quantified/monetized, but that National Grid has thought about before?

#### **Jeremy Newberger**

- The items in the table have been quantified to varying levels. The least confident quantifications are probably reliability, resiliency, and safety—they're harder to assess

#### **Seth Handy**

- [Least-cost procurement](#) needs both a short term and long-term consideration. Price impacts overtime and long term impacts of investments are critically important to consider. Investments can be high now, but in time can dramatically reduce system costs.
- Some concern on evaluating things as program-specific basis. Seems important to consider the all of the potential impacts of energy efficiency and distributed generation on the system and then come back and look at how programs could be better structured to accomplish goals

#### **Scudder Parker**

- Think about the tools we've used to get energy efficiency to a [high level of performance in RI](#), and how does the world change as we think about other dynamics on the system
- How do we recognize the value of things that we do that affect the energy system that support innovation and [market transformation](#)? Market transformation is a benefit that you don't count in programs now, but that are certainly a benefit to customers
- Part of the reason for supporting renewables programs is to help drive down the cost of those technologies down over time; not just to have environmental benefits, but to eventually provide lower-cost energy than tradition supply
- It's time to start thinking about jobs benefits. There is a mandate to consider in CHP [\[R.I. Gen. Laws § 39-1-27.7\(c\)\(6\)\(iii\)\(A\)\]](#), but no mandate either way on other programs. So it's allowable and should be considered.
- [Cost-effectiveness screening](#) is designed for energy efficiency measures, but not as good for about fuel choices, demand response, and load management. Finding the right test that can be used across different levels of potential benefit is a high priority for this docket.
- The system we're moving toward (with energy efficiency, distributed generation, demand response) is more and more about meeting energy needs, in part, by investing in smarter

building and equipment, and less capital in centralized/utility investment. Equity and affordability issues are very important here—how can we make capital available to low-income ratepayers so they are part of this shift?

**Todd**

- Referring to the equity issue related to Seth Handy's comments on short term versus long term evaluation -- it's hard to make short term program management equitable. Perhaps this is reasonable if longer term policy or management is careful to correct for inequities.

**Scudder**

- The idea used to be to spend some money to make rates survivable for low-income ratepayers; now we have a tool for low- and moderate-income folks to invest to make the system more equitable. We must be aware that disparity can increase if only those with good access to capital are making these investment decisions that are now possible on the system.

**Unidentified**

- A benefit to add to the list is reducing reliance on energy sources that are subject to (fuel) market fluctuations
- Net metering in the horizontal can be broken out into subsets, like traditional, remote, etc. because the benefits for these are different

**Tim Roughan**

- We're starting from an energy efficiency reference, which is helpful, but the idea there is that some benefits must go to someone other than the participant that created the benefit, otherwise there's not net benefits for anyone else
- When discussing monetizing benefits, we need to consider, just because a benefit is created, do we need to direct that entire benefit back to the participant, especially if the cost to that participant is lower than the benefit? If you do, there's no source of net benefits to other ratepayers
- How do we get as much net benefit to all other customers as we can, versus just rewarding participants

**Jeremy Newberger**

- Process-wise, talking about expanding the [draft framework](#), the next step is to talk about what perspective we're talking about. Energy efficiency has a different perspective from distributed generation, and that informs the choice of test—this is reflected in Figure 1 of the [South Carolina report](#).
- Other resources described earlier (water, delivered fuel, etc.) should be added to the benefits categories to consider—impact of electric distribution on other systems
- Add physical losses to the impacts (less energy transmitted means fewer losses on the system too)

**Todd**

- Zero-emission vehicles could also be added to the programs/policies list

**Jeremy Newberger**

- Systems Integration RI document lists some of these too

**Marion Gold**

- What's the process for adding materials for reading and review?
  - o Submit to [Cindy](#) and/or [Todd](#) and we'll [post](#) after a review. However, we will make sure to highlight any that should be read prior to meetings for those who have to prioritize the reading.
- Getting info in will be a great help
- We have questions of lowering overall system costs and then how to allocate costs
- We want to bring costs down as much as possible, then figure out how to divide the pie

## **Todd**

- [Long-Term and Distributed Generation](#) contracts, although these programs have “ended,” should be added to programs list
- [Affordable Clean Energy Security Act \(ACES\)](#) contracting should be added
- [Standard offer procurement contracting](#) can be added
- [Decoupling](#)
- Time-varying rates ([can only be on residential energy as a pilot](#))
- These are all in [Title 39](#), there are many more to find

## **Cindy**

- [Title 39](#) has a lot of policies and programs. We’ve had a request to get those abbreviated and on paper; we’re working on it
- Declarations of purposes in all of the statutes should be reviewed by the stakeholders
- Some of the things to consider is how to protect [retail access](#) while looking at the purposes related [standard offer and last-resort service](#) to engage in [least-cost procurement](#) and avoid volatility – some of these, on their faces, are at odds
- [Affordable gas for public housing \(ties into energy efficiency\)](#)
- [Legacy demand-side management statute](#)
- [Reasonable backup or supplemental rates](#)
- [Master meters \(might affect some business models\)](#)
- [Info required on bills](#)
- Different incentives to look at
- Trying to pull these together into one place (other than the General Assembly website)

## **Todd**

- [Siting policy can fit here \(tax, value, public health\)](#)

## **Abigail Anthony**

- Once these are all collected, how can the framework be utilized?
- Other than for a future rate case as discussed in the [staff memo to open the docket](#).
- There are a couple of proceedings that do use a framework, but there are probably a lot more.

## **Todd**

- Staff is hoping for the group and consultant to provide information in this docket that would support recommendations in four categories:
  1. Recommendations for ratemaking policy
  2. Recommendations for statutory changes
  3. Recommendations for further research (and pilots)
  4. Recommendation for existing program management
- This docket is a lot about rate design and a future rate case, but to Abigail’s question, perhaps looking for the framework to be useful for #4 (program management)

## **Cindy**

- Memo should be clear that distribution rates aren’t the only rates the PUC sets, and while the focus has been on distribution rates, if there useful tests and reviews for programs, it’s something this docket is intended to look at

## **Scudder**

- Referencing the [EERMC statute](#) is a useful one to add to the list (Title 42)
- [Resilient RI Act](#) also should be added to list
- Value of energy efficiency at peaks
- Start with broad assumption about what demand response is; we’re very early in DR, unlike EE, which is mature

## **Fred Unger**

- When the market is transformed, benefits are provided that we can't really calculate today
- There's a conflict between DR, DG, EE and the utility's ownership of transmission facilities
- Would like to see a recommendation come out of this process that utility can't be in transmission business

**Tim Roughan**

- In response to Fred Unger's comments, the transmission side of the business is highly regulated. Additionally, [FERC Order 1000](#) has opened up planning and construction to more parties
- It doesn't matter who owns the transmission entity, the costs will still flow to RI customers
- Fred's recommendation won't really assist in the process of understanding and lowering costs
- There's also inherent value in utility ownership of assets
- Don't want to leave anything off the table today

**Jerry Elmer**

- Setting aside the policy discussion of the benefits of utility-owned transmission assets, PUC is not the regulatory body; [FERC](#) is the regulatory body of transmission

**Todd**

- In agreement with Jerry, but also we should be aware of how policies in levels above (e.g. [ISO](#), [NERC](#)) and below (e.g. cities and towns) PUC's authority might also be important to inform this docket.

**Cindy**

- We are also hoping, in this docket, to improve coordination and communication between the different agencies and boards that relate to these issues
- One stakeholder concern was there is an imbalance of information and expertise—the PUC feels this way too
- We'll try to improve communication to benefit other dockets

**Todd**

- Want to hear from developers on what their drivers are
- We're meeting with the consultant soon; now is a good time to add to the four categories of recommendations that we outlined earlier.

**Seth**

- Should responses be submitted in writing to the group or through a call?
  - o In writing to [Cindy](#) and/or [Todd](#) and we'll work with or have the consultant compile and we'll share

**Cindy**

- We want to get something foundational to the consultant and to preserve the stakeholders' resources—really want to avoid starting from scratch when the consultant starts
- People can submit thoughts in writing in the next four weeks so we can introduce where the stakeholders are coming from to the consultant
- Nothing you add now will be considered final or set in stone
- Looking to help find, as a starting point, not just the big differences but also the more nuanced differences.

**Camillo Viveiros**

- George Wiley is focused on affordability and frequency of terminations

- We should look at ways to respect [the rules](#) and protections in place, and at ways to improve affordability and decrease terminations, particularly to protected ratepayer categories

**John Willumsen-Friedman**

- George Wiley Center views affordability is a distinct policy goal from limiting the frequency of terminations
- Affordability is a multi-tiered goal that can be achieved through numerous intervention throughout the system and with a unity of goals
- Terminations is a basic policy point that connects to costs and benefits outside of the system, e.g., hospitalization costs, employment costs, opportunity costs, etc. that are affect everybody in the state

**Marc Hanks**

- There are two components to consider on the [draft framework](#), customer facing and grid facing
- Consumer-facing leads to issues of consumer empowerment, consumer choice, how are customers making choices, etc. How do we go forward to incent good behavior going forward
- There are competitive entities like Direct Energy that are making smart devices available to address these issues and take advantage of new options like time-varying rates
- There are areas that will be natural for National Grid to help identify and enhancements that can be done on the system and costs and benefits
- It would be helpful to be better informed on the customer-facing side, and structurally maybe look at what policies and programs fall into that category.

**John Willumsen-Friedman**

- Not just customers' behavior, but what programs (customer-facing) exist that can be created that can lessen the burden on low-income and protected category folks

**Marc Hanks**

- There may be programs that we haven't contemplated yet
- Might be better informed through demonstrations that test the market in some of these cases

**Todd**

- We certainly should think about grid-facing, customer-facing, and, for discussion purposes perhaps, society-facing

**Unidentified**

- Any long-term cost reduction for ratepayers and the public in general only will come through continued investment
- We've talked about what type of requirements the grid will need to accommodate DG
- We need to find a way to understand what those investments are
- Interconnection costs are very variable, and that goes directly to the long term cost of being able to interconnect.
- If we have an ongoing investment into being able to handle the volumes of DG interconnected, we will find ways to lower capital cost investment needed
- Therefore investment, and the type of investments need to be better defined.

**Seth Handy**

- Our system was restructured some time ago, and some impacts were contemplated, some were not, and these could be relevant considerations
- Previous [Infrastructure, Safety, and Reliability dockets](#) have given the impression that there is not a lot of consideration in planning to better accommodate DG on the system



- The more that can be done to lower interconnection costs, the less we will invest in assets far away (e.g. gas generators, transmission, etc.)
- This should be included in a full picture, especially in considering what incentives exist for the utility

**Tim Roughan**

- Simplicity of messaging is important to keep in mind.
- Winter spikes revealed that customers didn't know about restructuring
- We can't assume people will understand and sign up.
- The myriad of programs (e.g. renewables) can cause paralysis for consumers

**Scudder Parker**

- Grid's position in [4568](#) was rate design and benefits of load management, Grid could only consider that on the distribution part of the bill, not energy
- That's a policy disconnect
- If there's a benefit on the distribution system, is there also a benefit in the retail market because it has affected the need in the market
- Can we get some picture from competitive suppliers (particularly residential and commercial suppliers) what you're offering, and how that correlates with what would be helpful on the distribution side?

**Tim Roughan**

- The market price of power is surprisingly low
- We've always assumed that as prices go up, people will respond. But, what if they don't really go up, or what rates only go up rarely and have no real impact?
- We need to think through what to do when prices are low, and when prices are high

**Todd**

- This could be a policy conflict. We want lower costs, but lower costs have negative feedback on other programs.
- True lower costs versus changes in streams of money is something to keep in mind
- We'll be calling on Grid and other to help identify the details of programs that pose policy conflicts