Shoreline Energy Advisors, LLC

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While I certainly recognize the necessity for initiatives aimed at improving energy efficiency and our transition to cleaner transportation fuels, my concerns are twofold:

1. The Energy Master Plan upon which Clean Energy programs are based upon, is lacking in practicality for successful implementation in the near term. It is idealistic and aspirational and while it is an ambitious and worthwhile "visioning" statement, it is severely lacking in the elements that would provide a realistic plan to achieve that vision. While the objectives are laudable in the long term, the EMP lacks specificity, metrics, and an attainable schedule based on an accurate scan of the current environment to reach those objectives. One of the dangers of having a plan with these faults, is that we plunge head-first to implement programs such as those included in this proposed budget, putting the cart well in front of the horse. Those who stand to achieve immediate benefit from the implementation of these programs, rapidly jump on board without thought as to the cost or functionality to rate payers, gladly directing their efforts into implementation whether, they believe it is the right approach or not. This brings me to my second concern:
2. The method and vehicle we have chosen to facilitate these transitional programs. Specifically, the use of electric utilities as the primary program manager for many of these initiatives. My belief is that we have gradually moved away from the well-founded rationale for regulating electric utility entities and have created an abnormal economic monstrosity that operates a hybrid business which encompasses programs that should, and should not, be subject to rate payer funding. In doing so we have weakened our efforts and effectiveness in providing the primary function of regulated electric utilities, that being the provision of reliable and resilient electric delivery service to their captive rate payers.

Energy Master Plans – Need for less Aspirational Vision and more Practicality

William F. Buckley, Jr. once said "Idealism is fine but when it approaches reality, the cost become prohibitive."

While the value of strategic planning is indisputable for an organization, our Energy Master Plans have evolved to being vision statements dependent upon the political objectives of whomever happens to be sitting in the governor's chair at a particular point in time.

While the governor sets the tone, typically, the responsibility for EMP development has been delegated to intelligent and enthusiastic ideologs sometimes lacking in practical working experience in energy industries. As a result, we end up delegating responsibilities for energy policy to consulting firms who have their own internal biases which dictate their opinions and are always supportive of their historical revenue base and targeted market niche. Two cases in point on consulting work that are often used as justification for our energy policy: Rocky Mountain Institute and the United Nation's much publicized "Code Red for Humanity,"

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a/k/a "Climate Change 2021" (the report from the United Nation's Intergovernmental Panel on Climate Change).

Rocky Mountain Institute has as its mission statement "transformation of the global energy system to secure a clean, prosperous zero-carbon future for all." They are unabashedly anti-fossil fuel in everything they research, publish or advocate. Similarly, the U.N. panel was populated exclusively with climate control environmentalists in all three of its Working Groups who clearly had their opinions formed before they put pen to paper. While I agree with the U.N.'s concerns, using biased sources to justify energy policy without considering wider perspectives results in suboptimal deployment of ratepayer dollars.

As examples, programs which promote electric vehicles before uniform fast-charging protocols are instituted, and programs which anticipate rapid wholesale conversions of existing natural gas heating to electric, and gasoline powered vehicles to electric, are symptomatic of admirable vision but poor tactical execution. While directionally their goals are valid, the thought that they can, and will be, widely accepted before major barriers to implementation are addressed is quixotic.

Perhaps the most prolific and effective environmentalist ever to serve in elected office, Theodore Roosevelt opined, "Practical efficiency is common, and lofty idealism is not uncommon, it is the combination which is necessary, and the combination is rare."

The Concept of a Regulated Utility

The concept of a public utility was created to address businesses and operations that are a natural monopoly. A natural monopoly is a type of monopoly that occurs due to high fixed costs and a need to achieve extreme economies of scale. In other words, it is only economically viable for one business to serve the market. Examples include utilities and train lines. In these industries the infrastructural costs are so high that two companies competing in the market would make it unprofitable for the other. In the case of electric transmission and distribution, having multiple electric lines running in the same neighborhood is uneconomic, unwieldly and unsightly as Thomas Edison and George Westinghouse discovered way back in the 1880's.

Our energy grid (transmission and distribution) is a sophisticated network that transfers electricity from power plants to individual customers. Clearly this type of operation has extremely high infrastructure costs which are fixed. While high fixed costs characterize a monopoly, low marginal costs are also a defining characteristic meaning the incremental cost of adding an additional customer to a monopoly's customer base is extremely low. These are hallmarks of a natural monopoly.

While power generation is no longer a natural monopoly, nuclear generation has evolved to have extremely high fixed costs and barriers to entry. These barriers are in the form of specialized expertise and the public's unwillingness to site multiple nuclear facilities in their backyard. Nuclear generation does not have all the classic characteristics of a natural monopoly since generation can come from multiple sources and can be transported on common carrier transmission lines. This is akin to multiple oil producers who transport their production on a common pipeline. However, given the impracticality of siting multiple nuclear generators and nuclear waste sites, treating them as a monopoly in each region seems to make sense.

In the case of both the electric grid and nuclear generation with time, government control evolved over these markets for good reason. This was to prevent private entities (the electric utility) with extreme market power

and formidable barriers to entry from overcharging, being sloppy in their operations, or otherwise taking advantage of their consumers.

The Creeping Mutation of Electric Utilities

While electric transmission and distribution, and nuclear generation and waste management would seem to be businesses which are monopolies and should be subject to government oversight, particularly as it relates to safety, reliability, resiliency and pricing, other businesses which do not have characteristics of a monopoly have been generously affixed to electric utilities when in fact, they would be better run in a competitive environment.

My question, which I hope the Board will consider, is why are we "endowing" products and services like electric vehicles, solar, storage, renewables, and efficiency solely to electric utilities, allowing them to earn risk-free returns for their shareholders on their captive customer's dime? Having a regulated rate of return on these businesses included in the price we pay for electricity is problematic:

1. These types of businesses would evolve faster, and more economically when multiple firms, and national resources, participate in developing and supplying these services.
    a. The utility decision making process is slow and unwieldly and having it subject to regulatory oversight, external studies, and stakeholder input, only serves to stunt the normal growth that would occur when multiple firms operate in a competitive environment, fairly participating with an unsubsidized profit motive.
    b. I question the need for a government sponsored program for renewables, electric vehicles, energy storage and efficiency and by extension, an electric utility "middle-man" program manager. This only serves to layer additional cost and unnecessary market intervention into these products and services.
    c. Electric utilities have multiple inherent conflicts of interest when one service they offer (efficiency for example) has a negative effect on other services they offer (moving electrons). Given this their involvement in efficiency only occurs after the conflicts and negative effects on transmission and distribution (and nuclear generation) are considered and mitigated through ill-conceived treatments that are contrary to free-market operations. This results in longer time for new service development and higher costs for the consumer.
    d. If it is felt that there is a need for government intervention in certain technologies to speed their evolution for the public good, the segmented and fragmented approach individual states like NJ are taking is inefficient, costly and a drop in the bucket which will not achieve the desired objectives. Initiatives aimed at achieving electrified transportation and clean air need to be pursued on a national level or even international level if they are to be effective.

2. Most Societal Benefits charges or other arcane adders to the retail price paid to electric utilities to pay for these non-monopoly services are undeniably regressive and place a burden on economically challenged segments of our communities who involuntarily pay the same as the wealthy while not having the opportunity to absorb the costs and enjoy the benefits of something like an electric vehicle. Wealthier segments of our community are reaping the benefits of grants to purchase an electric vehicle and the convenience of publicly funded charging stations, while these services and products are being subsidized by the less fortunate.

How did we get here?

I assume part of the rationale for allowing electric utilities to be involved in non-monopoly businesses is that in New Jersey they are operating in mature, fully developed franchise territories. The transmission and distribution of electricity can only grow when there is economic growth in the market being served. The greater the economic growth and population density, the greater the need for electricity. With mature geographic markets like we have in New Jersey, with equally mature economies, there is little room for product and revenue growth in the markets for transmission and distribution.

Compounding this, over the years the primary investor in electric utility stocks has transitioned from those who were willing to accept a lower growth in cash flow for a less risky investment, to those who now place a premium on steady and robust growth in dividends and earnings. The only way for an electric utility in New Jersey to produce the growth they tout to the investment community is by introducing new products and services (e.g.: non-traditional utility products like those related to EV's, efficiency, renewable generation, etc.), or, by raising prices on legacy transmission and distribution services.

The customary cushion that comes from core businesses which can provide earnings and borrowing capacity to finance profitable new ventures via traditional research and development (something that a Honeywell, Siemens, United Technologies, and other free-market participants have) does not exist in New Jersey electric utilities yet we have "endowed" new services like EV's, efficiency and renewables to electric utilities via legislative or regulatory fiat, giving them relatively unfettered control over product development with the added bonus of subsidized pricing.

I would suggest that we revisit the rationale and results of the current methods of "bottle-feeding" electric utility earnings to produce a growth curve that is attractive to investors but of little value to our rate payers. There is a higher and better use of rate payer funding that will place electric utilities on an economically viable, more appropriate path.

Bigger Fish to Fry

Electric utilities are undeniably an important supplier of essential services to our communities. Their economic health and continuing operation should be assured but with far less risky, destructive, and economically torturous methods than the current approach of subsidizing their entry into businesses which should be operated in a free market. Bridge and tunnel, and highway authorities operate essential services in natural monopolies and their model of corporate structure should be considered. Like electric utilities the demand for their services is steady and predictable with negligible risk in volume variation. They are primarily financed with customer revenues and bonding at interest rates that are far lower than an electric utility weighted average cost of capital. The reason for this cost of capital discrepancy between public authorities and electric utilities is that they have been kept out of both risky businesses and research and development

If electric utilities were restructured with non-monopoly businesses being spun off into separate corporate ownership, the remaining assets would present an investment profile like a bridge or tunnel authority. Not only would the cost of capital on the remaining assets post spin-off be lower, but the elimination of the distraction to management focus from businesses that are not core, regulated businesses would be eliminated, resulting in cheaper energy, better performance, and more reliable service.

Regulators are cognizant of the rate payer's ability to pay only so much for electricity before they will push back. Today you are forced to consider this rate payer concern when determining what goes on a tariff. This results in funds that could be going to improving core electric utility services (T&D, nuclear generation, nuclear waste management, and nuclear safety) going instead to things like electric vehicles, efficiency, and renewable generation.

Electric utilities have a poor record of supplying resilient and reliable power. If rate-payer dollars going to non-monopoly initiatives were instead directed to hardening the grid, I think most would agree that this would be a more appropriate and democratic use of rate payer dollars.

What does this have to do with efficiency programs? Well, in my view placing the responsibility for overseeing and administering many of these initiatives with regulated electric utilities is a problem when they clearly have room to improve resilience and reliability. Directing non-monopoly subsidies to T&D and nuclear safety over a period of years would result in billions of dollars of improvements and increased reliability and safety which would be beneficial to every rate payer. From a financial standpoint, those investments could be reflected in rate base that is comparable to today's, allowing electric utilities to earn their income in their core business. In other words, replace aspirational efficiency and electric vehicles subsidy with rate-based investment in Transmission and Distribution and Nuclear Safety.

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