In its review of the Rhode Island Inquiry into the Electric Utility Business Model and Request for Stakeholder Comment (“the Request”) Dynamic Energy Group (“DEG”) identified the following phrase as having fundamental importance to the inquiry and response process:

“...these changes reflect a larger transformation of the power sector from a system organized around the flow of electricity from central station generators to end users toward a system with multi-directional flow, greater stability, and higher efficiency.” (Introduction, page 1, ¶ 2)

This phrase was selected because it best articulates what DEG believes to be the fundamental challenge any entity will face in disaggregating centralized energy delivery; that is, the separation of the critical infrastructure that is needed to support existing, new and emerging services and those services themselves. Clearly defining this separation of concerns (required/enabling infrastructure versus existing, new, emerging services) will be paramount to fair and efficient rule-making and rate-making related to roles, responsibilities, requirements and investment of a truly optimized energy delivery system.

DEG believes that the first step in clarifying this separation of concerns is to consider the logical constraints associated with two of the highlighted aspects of the Request; those being multi-directional flow and greater stability. These are bedrock aspects of the energy delivery system and in the interest of supporting the widest variety and greatest efficiency of current and future “services,” the stability and reliability requirements and specifications of this system should stand alone. Parameters for the optimal operation of the system should be established based on stability/reliability, durability and asset lifecycle. This upfront work allows for the development of performance and cost baselines that will be of critical importance not only to meet project and required operational standards but also to ensure that true costs and benefits of adding and operating delivery system services can be properly evaluated. In addition, to the extent that efficiency and/or optimizing services require additional delivery system functionality, that request can be evaluated with respect to how it changes those baselines (For example, it would be great to add “X” functional service to the edge of the network but in doing so what are the impacts to baseline costs and performance?).

Optimally, the bedrock energy delivery system is engineered, built, commissioned and operated to meet energy delivery requirements and standards and to support the efficient operation of existing, new and emerging services. Delivery of these services must happen in a way that is ubiquitous, predictable and measurable. Innovation and development of new and improved services will be enhanced by the opportunity for many players to compete for a share in the services market. One need only look at the accelerated development of cellular device applications to see how innovation can thrive outside ownership and control of delivery infrastructure. The extent to which a value proposition can be associated with compensation at any point along the delivery system will have a significant bearing on the extent to which innovation will propel efficiency and optimization forward. Services that use the network and provide value to one or more stakeholders can be anything from distributed-generation (specific siting could significantly impact marginal value), to overlay Integrated Volt Var Control (which supplies marginal CVR and Var support value within the guard rails of the utility’s bus settings), to micro-storage (when aggregated could provide valuable peak and shoulder load management).

Given this “opening statement” Dynamic Energy Group provides input to the Request as follows:
Questions for Stakeholders on Utility Functions

1. **What functions described here are integral to the future electric utility?**
   As noted in the opening statement, DEG believes that the first step in clarifying this separation of concerns is to consider the logical constraints associated with two of the highlighted aspects of the Request; those being multi-directional flow and greater stability. These are bedrock aspects of the energy delivery system and in the interest of supporting the widest variety and greatest efficiency of current and future “services,” the stability and reliability requirements and specifications of this system should stand alone.

2. **Are there additional functions not described here that should be included as a strategic focus of the electric utility?**
   DEG believes that the Request thoroughly address critical electric utility functions. DEG notes the importance of the term “strategic focus” in this question and suggests that Administrators work with Rhode Island’s electric utility to formulate a strategic focus that is underpinned by the bedrock aspects of energy delivery. This would include everything from electricity delivery, to system security, to understanding how a changed business model would affect the utility’s credit and equity standing. In terms of strategic focus, one task that should be considered very early on is establishing points of demarcation and logical structure in the overall “network” of energy delivery so that the roll up of “services” is rules based and so that the value of the utility’s role as the overarching network administrator/manager is recognized and compensated.

3. **Are there additional functions described here that should be provided by an unregulated third party, or through a market-based approach?**
   A properly structured network environment will safely and efficiently drive value based innovation; it isn’t really possible to envision what all of those innovations will be. At this point focus is best placed on a transparent structure that allows for coexisting business entities.

4. **To the extent certain activities now being performed by the utility may be performed by other market actors, what type of oversight should be in place to protect customer interest?**
   DEG suggests that cost and performance transparency (along with data security) are of critical importance to safeguarding customer interests.

5. **Many of the functions described here require the utility to manage complex technology systems. What kind of regulatory approach could address the risk of technology obsolescence?**
   DEG reiterates that an important area of focus should be developing and understanding of the costs and values associated with the utility performing the role of overarching network administrator/manager. Establishing performance criteria related to investment efficiency and technology utilization will go a long way toward mitigating obsolescence.

Questions for Stakeholders on Compensation

1. **How should decisions made by a utility in performing particular functions affect the way it is compensated?**
   DEG believes that the first step in answering this question requires a deeper dive into what roles and responsibilities the utility will have to take on in order to support Rhode Island’s vision for a nimble grid. If this process fails to recognize the utility (to a certain extent at least) as a technology company, an important opportunity will be missed.
2. What are ratepayers paying the utility for? How should it collect its revenue? Should its compensation differ according to each function?

*DEG believes these questions will be better answered once stakeholders agree to the utility’s strategic focus, which is wholly dependent on the extent to which the administration/management requirements of the utility as a “technology company” are explored.*

3. Do any of the future utility functions described here merit a particular type of revenue recovery mechanism?

*DEG believes it is possible to articulate most of the utility’s roles and responsibilities under a performance based structure. DEG also believes that network and delivery mechanics can be structured in such a way to allow the utility to support higher system utilization and value; recovery should reflect this. Perhaps revenue is an outdated term and should be replaced with terminology that reflects the idea of value creation.*

**Questions for Stakeholders on Performance Incentive Mechanisms**

1. There exist a range of policy goals to orient a performance based regulatory framework including reliability, cost reduction, system efficiency, and greenhouse gas emissions reductions. Are there additional goals that should orient performance based financial incentives?

*DEG would nominate security and asset utilization as other specific named objectives.*

2. What portion of the utility’s revenue should be subject to performance inventive mechanisms? Should that portion change over time?

*See previous section answer 3. The utility has a cohort of stakeholders that exist largely outside of this process. This cohort includes equity analysts and investors. More important than “timeframe” is the idea that the utility needs to be fully compensated for the value they provide and be given adequate clarity so that they can advise this external cohort as to how these changes will make them stronger in terms of equity and credit.*

3. Are there any costs associated with new or old services which should be isolated from the utility’s revenue requirement and made separately subject to performance incentives that place cost recovery at risk while creating the potential for the utility to earn more than the cost?

*Probably.*

4. What is the appropriate balance between potential rewards and penalties? Should rewards begin as symmetrical with potential penalties? Should the relative size of penalties and rewards change over time as the utility gains experience operating in a new regulatory framework? Do existing performance based incentives provide a sufficient learning experience for customers, vendors and the utility?

*DEG reiterates that supporting the utility in redefining its strategic focus in a way that promotes and compensates value creation will help establish the runway for these types of questions.*

5. How should a potential enterprise-wide performance-based regulatory framework interact with existing performance incentives, such as statutory performance incentives for energy efficiency and renewable energy?

*DEG believes that to a great extent this will depend on how “services” are defined and how the logical electricity delivery system is structured to support 3rd party involvement (which is undoubtedly the most efficient means to innovation). If all costs and values associated with allowing these services to be fairly and efficiently performed by 3rd parties are accounted for, then modifying and developing an initial incentive structure should be straightforward.*
6. If a performance based plan is implemented through basis point rewards and penalties on the return on rate base, what range around the utility’s allowed ROE should be used?

*DEG does not have an opinion on this at this time.*

7. What utility behaviors should Rhode Island be trying to change with performance based incentives? What do we want the utility doing tomorrow that they are not doing today under traditional rate regulation?

*DEG points to many of the concepts already discussed: Governance and management of bedrock delivery aspects vs. service delivery; utility as administrator/manager of a “network of networks,“; positioning the utility more as a technology company, etc.*