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> Atlanta, Georgia Stakeholder Meeting on DOE Quadrennial Energy Report, Part 2 Panel 3, Financing Electric Infrastructure

Good afternoon, my name is James Fuller, President and Chief Executive Officer for the Municipal Electric Authority of Georgia, commonly known as MEAG Power. I appreciate the opportunity to be with you today to share a few key MEAG Power experiences on the Financing of Electric Infrastructure.

MEAG Power was solely created for one purpose, to serve our 49 participant "public power" communities in Georgia, with reliable and affordable wholesale electricity. We operate without profit and have no shareholders. Our costs incurred for the supply of power are directly reflected in the electric bills of the retail electricity consumers in our 49 communities. It is on behalf of the citizens of the 49 communities that I provide these comments today.

MEAG Power has ownership in four nuclear units, four coal units, and wholly owns a natural gas combined cycle facility. Additionally, we own approximately 1,300 miles of transmission lines throughout the state of Georgia, which are a part of the Georgia Integrated Transmission System. This system, which we know as the ITS, is a jointly planned and operated transmission system spanning the state, which serves customers of the public power, electric co-op, and investor-owned sectors in Georgia. Also, MEAG schedules and delivers the hydro energy that MEAG's participant communities are subscribed to through the Southeast Power Administration (SEPA).

MEAG Power has a 22.7% ownership share in the new nuclear units at Plant Vogtle, including Units 3 & 4. These units are assets that are expected to provide 40+ years of emission free energy at stable prices, largely satisfying the growth needs of our member communities for decades.

The Federal government has definitely shown an ability to shape the energy industry. For example:

- 1 Renewable energy grants and tax credits have spurred investment and innovation and have led to consumers having access to more and decreasingly expensive, green energy. There has been some collateral damage and confusion in the process, but the Federal government has had an impact in an area that is important to many of our customers.
- 2 Nuclear licensing improvements and financing incentives have contributed to the survival, if not quite the revival, of the nuclear industry. Most industry experts would probably agree that our country needs a carbon-free baseload resource alternative. With the current very low natural gas prices, the cost of nuclear is not as compelling as it was when we made that decision to proceed. But with moderate delays and construction cost increases, offset by very favorable financing costs, the cost of nuclear for MEAG Power remains very close to projections made almost 10 years ago. The Federal government has played a major role in preserving nuclear as a viable alternative for now and the future when we might really need it.
- 3 Regarding natural gas, we should be thanking the Federal government for what it has not done, but many are calling for severely curtailing hydraulic fracturing. Whatever side of that debate you might be on, we are in the middle of an energy revolution in the United States. It is hard to tell what would be happening if we had \$120/bbl oil, \$8 natural gas and limited US production, but the economy would be much different if consumers were paying \$1 trillion a year more for energy, with most of that going overseas.
- 4 Transmission. FERC has been accommodative of some very different regional transmission models. Investment is occurring. But not fast enough and not fair enough for some participants. When you are talking about 50-year assets, where technology is changing rapidly, maybe slow is not necessarily bad.

So all that adds up to a passing grade for the Federal government's role in the energy industry.

However.....more can be done, and more efficiently/effectively.

From a public power standpoint, there are ways the Federal government can more effectively apply the financial benefits and risk assumptions involved in its programs to accomplish its goals.

Here are a couple of examples:

Some of the Federal nuclear incentives do not provide their highest possible benefit to consumers. In some cases, this is because they were developed or implemented based on existing incentives for non-nuclear programs. For example, the DOE nuclear loan guarantee program evolved out of loan programs for renewable technologies – that had shorter expected useful lives and much shorter construction schedules. The nuclear loan program provides very effective 30-year financing. But with a 6-8 year construction period and a 40+ year expected life, repaying a 40 to 60 year asset in 30 years is particularly difficult in the public power financing model that typically amortizes debt over the useful life of the assets.

The DOE financial assistance framework for electric projects needs to be developed to provide a better understanding of the credit aspects and financing structures of non-profit utilities. This applies to both wholesale and retail participants in the industry and includes municipal, state, cooperative and federal utilities. Together these entities account for something approaching 1/3 of the utility industry. It is important to know that generally speaking these entities function with very little "equity". The equity they do have is generally obtained from retained earnings, which makes it difficult to build equity to significant levels since one of the main purposes behind their very existence is to provide electricity at the lowest possible cost.

Also, the non-profit segment of the industry cannot, for legal and structural reasons, go into the market and raise equity through the issuance of common and preferred stock. Because of their non-profit nature, they cannot generate the levels of coverage that investor owned utilities enjoy. However, notwithstanding this, the non-profit segment of the industry is generally regarded by both rating agencies and investors as having the highest credit quality. [Federal utilities are generally rated Aa/Aaa, municipal utilities are generally A/Aa and electric cooperatives are generally A/A+.] It is important to note that, for legal reasons, it is often difficult for federal and municipal utilities to finance on a secured basis.

This runs counter to the expectations of many in the DOE structure, but they need to gain an understanding of this and the elements that make this segment of the industry a better credit. For instance, rates of non-profit utilities are usually not regulated. This means that they can implement rate increases as needed and without risk of regulatory review or interference. Wholesale non-profit electric utilities have strong contracts that allow for the billing of all costs on a timely basis to their retail system customers that have strongly protected service areas with, generally, little exposure to retail competition.

The development of Units 3 & 4 at Plant Vogtle is a capital intensive project, requiring substantial up-front funding to construct the plant, in exchange for low, stable operating costs over an expansive time frame. Given this capital requirement, and the fact that MEAG Power has no shareholders, MEAG must utilize external sources to secure the funding for this project.

In the case of the new Vogtle units, MEAG Power has largely relied on two funding sources of public fixed rate debt including Build America Bonds (BAB's) and the Department of Energy Federal Loan Guarantee Program. In the case of the Build America Bond program, which was implemented as a part of President Obama's stimulus plan in 2009, it presented an opportunity for MEAG Power, as well as many other public power providers across the country, to reinvigorate the economy through infrastructure improvement, of which, Plant Vogtle is a prime example.

However, despite the commitment provided by the United States government, and the contractual obligations associated with the transaction, the Build America Bond program was included in sequestration. What had been offered to secure commitments to improve infrastructure and reinvigorate the economy was reneged on, and the benefits promised have been and continue to be reduced, which for MEAG Power, represents an impact of approximately \$4.5 million annually.

Through the act of sequestration, which in MEAG Power's case affects ratepayers in 41 of our Participant communities, and is further being felt by BAB's recipients across the country, the effect is a loss in faith in future federal incentives, which although well intended may not be counted on to provide the benefits advertised. MEAG would urge that the Administration and Congress work to end the Build

America Bond's inclusion in the sequester, which is scheduled to last through 2025.

Production tax credits are another example of the suboptimal implementation of a Federal subsidy. In order for our ratepayers to obtain the full benefit of the cost of the Federal tax credits, we would need more flexibility to sell them to a wider audience. Current limitations on who can use the credit are likely to shift benefit away from the utility customers and toward the user of the tax credits. Either way, the cost is the same to the Federal government, but we'd like to see more of the benefit go to our customer.

An example of this is related to MEAG's ownership in Plant Vogtle Units 3 & 4 and is worthy of consideration in this proceeding relates to a provision in the Energy Policy Act of 2005, regarding the issuance of production tax credits for new, advanced nuclear facilities. The Vogtle Units 3 & 4 project meets the requirements for new, advanced nuclear facilities, and as such, MEAG Power has been allocated its pro-rata share of the production tax credits by the Department of the Treasury.

However, being a not for profit, tax-exempt entity, MEAG Power has been availed no mechanism to allow for the monetization of these production tax credits. The intent of this provision in the Energy Policy Act of 2005 was clearly to provide an incentive to encourage new investment in advanced nuclear technology, out of recognition of the significant uncertainty of being a first mover into such a project, where there had not been a new nuclear generating project undertaken in over 30 years.

MEAG Power, along with the co-owners in the project, all took on this risk and uncertainty equally. Yet for MEAG Power, our Participant communities and their customers, those intended benefits will be left stranded and unutilized without intervention from Congress. The present value of this stranded benefit to the MEAG Power share of Vogtle units 3 & 4 is approximately \$500 million. We urge the Department of Energy through the QER process, to help level the playing field such that any tax incentives made available in the energy industry, be provided a mechanism for utilization by the public power sector for the direct benefit of the end user.

This dynamic is repeated when a public power issuer tries to benefit from renewable incentives. There are financial structures that allow public power to benefit from renewable tax credits – but they are inefficient and lead to a greater share of the benefit accruing to a Federal taxpayer as opposed to a utility customer.

In our view, these inefficiencies are caused when Federal programs fail to fully recognize some of the unique features of public power, or when there is too strong a desire to modify existing energy programs to fit new initiatives. Public power is deserving of a greater voice in the development of energy incentives. It is not that we want a bigger share of the benefit (or not **just** that we want a bigger share), but we can also help craft the incentives to make sure that the Federal programs translate directly to benefit the electric consumer and more effectively achieve the desired goals of the program without excluding an entire segment of utility customers.

The public power financing model is also one that does not fit well with the typical renewable energy financing model. Most renewable project finance involves equity investment and an asset pledge. MEAG Power was eventually successful in adapting our financing structure to meet the DOE project-based model, but we had to jump through quite a few hoops to make the DOE loan program work for us – even when we feel that the public power credit structure is much stronger than the project finance model.

The renewables area has been subsidized by various tax benefits that are, generally, unavailable to the non-profit segment or available only through complex and costly structures. This is not justified by any distinction in their tax status since often the for profit segment actually pays little or no tax and can only benefit from the tax attributes by selling these benefits off to tax equity investors which are not themselves utilities. It would benefit all if these benefits were to be made available to all across the industry, possibly through the use of cash payments in lieu of tax credits that were previously available to taxable, but not tax paying, utilities.

Tax regulations in the renewables arena tend to favor non-utility generators over utility generators which result in more renewable generation being brought to the market through power purchase arrangements rather than direct ownership which funnels off some of the tax incentives inefficiently. This affects both taxable as well as tax exempt utilities. Consideration should be given to allowing the tax benefits to be utilized on an equal basis by all owners of renewable projects.

Additionally, looking to invest in the future of their communities, our members have not only committed to the construction of new non-emitting resources in Vogtle Units 3 & 4, but have also funded a half-billion dollars in state-of-the-art emission control improvements for our coal generating resources based on recent federal and state rules. To put it in perspective, the cost to implement these emission reduction controls exceeds the original cost to construct these plants. Additionally, the costs of these new environmental controls are financed by MEAG Power over a period extending to 2042.

The final Clean Power Plan penalizes the communities for these investments by asking for even more emission reductions, despite having already achieved substantial reductions in CO2 emissions since 2005. Should the Clean Power Plan be upheld by the courts, it would likely require significantly reduced coal unit operation, potentially even requiring premature shutdown of the units, which strands the cost of the recent environmental investments and again raises the cost of electricity to consumers in these communities.

Between the nuclear and hydroelectric resources, 57% of the electricity MEAG delivered to its communities was completely CO2-emission free. Only 41% of the electricity was from coal or natural gas generating units. These ratios are exceptional in the industry.

The electricity MEAG delivered in 2015 had an overall emission rate of no more than 640 lbs. CO2/Megawatt hour (MWh). But the rule does not give MEAG any credit for these forward-thinking environmental stewardship measures. The rule will instead require MEAG to eliminate or significantly underutilize its fossil fuel-fired power plant capacity to meet the Rule's future emission limits, leaving stranded much of the half a billion dollars in investment made to meet prior rules.

MEAG Power is preeminently concerned for the well-being of those in our Participant communities, and strives to provide them wholesale electricity with the highest reliability, at the lowest cost, while valuing stability and environmental stewardship. Nearly all of the communities MEAG serve have higher poverty levels than the United States and Georgia averages, and many have a more than 50% minority population. It is these individuals that fare the worst when costs increase, and that enjoy the benefit the most when costs decrease. We hope the Department of Energy, through its QER process will strive to ensure their well-being, as we do.