

To: Austin Generation Resource Planning Task Force

August 12, 2009

From: Roger Wood – Task Force Member  
Freescale Semiconductor, Inc.  
[roger.wood@freescale.com](mailto:roger.wood@freescale.com)  
512-895-6070

Ref: AE Generation Plan - Issues for Discussion

All businesses want to be as green as possible but to be competitive and survive; they must also have reliable and affordable power. The current AE plan contains green goals but has no reliability and affordability goals. A key objective of the Task Force should be to bring a balance of these three elements to the plan.

In addition to reviewing the AE generation plan, the Task Force should make recommendations on processes related to the plan such as plan implementation and plan updating.

- a. **Reliable Power** - Reliable power is critical for local manufacturing and non manufacturing business of all sizes.
  - a. A single power outage or power sag for less than one second can cost millions of dollars in production losses for a large manufacturing customer like Freescale.
  - b. In recent times, most customer reliability issues were associated with failures of the utility transmission and distribution grids and were localized to a single or small number of businesses. As more intermittent generation (i.e. wind, solar) is added to the ERCOT grid, the risk of power outages (due to capacity/load mismatch) increases as the per cent intermittent generation increases. Failures of this of type can impact large geographical areas causing aggregate local business losses of tens or hundreds of millions of dollars.
  - c. AE's generation plan should provide for a generation mix that enhances the overall ERCOT grid reliability. This should be quantifiable for a given generation mix. The Task Force should recommend this be required criteria in evaluating the various generation plan scenarios. In addition there should be reliability goals in the plan, just as there are carbon and renewable goals.
- b. **Affordable Power** - AE rates for large businesses are currently significantly higher in Austin than San Antonio. This results in the loss of existing and potential future jobs to that area as well as other lower cost areas.
  - a. The AE generation plan needs to include a strategy to close that cost gap, not just a strategy that looks at relative merits of Austin-only scenarios. San Antonio has a goal to have the lowest power cost among the top 10 major cities in the USA. Where is AE's cost goal?
  - b. A few per cent increase in electric rates translates into millions of dollars per year of additional cost for a major manufacturer. For the aggregate of Austin businesses this amounts to hundreds of millions of dollars.
  - c. When AE electric rates increase, businesses currently don't have the option to switch to a lower cost supplier. If they pass these cost increases on to their customers, those customers can and do go elsewhere with their business. If they absorb these costs, they must remove costs elsewhere. This can translate into job reductions, movement of business to lower cost locations or even business failures. The loss of existing jobs in Austin, due to cost increases, needs to be weighed against the creation of jobs for each of the various generation plan scenarios.
  - d. The Task Force should recommend business impact be a required criteria in evaluating generation plan scenarios. In addition there should be cost goals in the plan, just as there are carbon and renewable goals.
- c. **Green Power** – Renewable generation and demand side management (DSM) are both part of the AE generation plan. We support both of these but we also have concerns about their mix in the plan.
  - a. Virtually everyone agrees DSM is preferred since it not only reduces carbon but also reduces utility consumption and thus cost.
  - b. AE currently spends an average of \$350/kW for DSM. In all the generation scenarios under consideration, ratepayers will spend \$700/k/w - \$6,000/kW for new generation (more when you include fuel and O&M costs). If DSM is the preferred approach, AE should be spending much more on it and less on new generation.
  - c. At Freescale Semiconductor, equivalent dollars spent on DSM (vs. renewable generation additions) yield more carbon reduction, reduce consumption/cost, and create more local jobs. Each year Freescale sets new global and local energy and water efficiency/conservation goals (sustainable annualized savings for new conservation projects implemented during that year). In addition Freescale sets global and local energy and water maximum consumption goals. It has internal teams and programs that continually work to achieve those goals. Last year the company implemented a new program called "Lean" to further reduce costs. Small teams are formed and empowered to identify and reduce waste (including energy and water) in specific operations or processes. During

the last 18 months the company empowered 900 teams involving 7,500 people to capture over \$90M in savings. These and similar programs demonstrate Freescale's strong belief and commitment to DSM.

- d. The Task Force should recommend AE put much more emphasis on DSM and give customers the option to spend their utility money on DSM (vs. new generation) when the benefits to the local environment and economy are greater. Perhaps this could be more effectively accomplished if the current scenario evaluation process treated DSM as another generation source, being compared (based on reliability, affordability, and carbon) with currently identified sources.

d. Other AE Generation Plan Issues

- a. Flexibility - The plan needs to be flexible.
  - i. Key influencing parameters such as fuel costs, construction costs, legislation, technology, and the economy are moving targets with often significant volatility, unpredictability, and range of possible values.
  - ii. The Task Force should recommend commitment to a process for reviewing the plan at regular intervals, at significant milestones or as key influencing factors dictate. The process needs to provide for performance balanced between green, reliability and cost goals and allow changing of goals as future conditions warrant.
- b. AE Transparency/Communications
  - i. If we lived in a deregulated area, and suspected our electric supplier costs/prices were excessive, we would shop around for a new supplier. We currently don't have that option in Austin. As a result, the best way to understand if AE costs are excessive is to have good visibility/access into AE's cost structure, operations, and decision making process. Businesses are frustrated of being told, "that's confidential information" or having decisions made that significantly impact to their bill without their knowledge or input. Remember, ratepayers are the "customers". They're the people and organizations paying for all of AE services and programs. Common sense dictates they should be informed and involved early in key decision making processes that impact their costs.
  - ii. We need unfiltered flow of communications from us (and all AE stakeholders) to/through AE to City Council related to important utility concerns/issues. When this doesn't happen we are forced to take issues directly to the Council. This was one key reason for the formation of the Task Force.
  - iii. The Task Force should provide recommendations to improve the current transparency/communications situation.
- c. Public Involvement in PPA Process – Except for Sand Hill plant expansions, the AE plan does not identify who will own future generation additions.
  - i. Based on recent decisions (through 2012) it appears most new generation will owned/operated by others (PPAs) and funded through the customer fuel pass through charge. This means AE/COA will no longer share financial risk in projects, leaving it all to ratepayers and PPA suppliers. Compounding this is the significantly less stringent AE/COA review/approval process for PPAs vs. capital acquisitions. Without this intense public capital review process, ratepayers are being further removed from the decision making oversight process.
  - ii. The Task Force needs to provide recommendations for better involvement of ratepayers in the PPA process.
- d. Green Choice - This program has been very successful and should be continued with 100% commitment by AE.
  - i. AE needs to find and price Green Choice options so they are financially attractive to customers. AE used to have the lowest cost green power. Currently AE has some of the most expensive green power in the state. Batch 6 pricing and re-pricing highlights this issue.
  - ii. AE has not significantly changed its marketing strategies in the last 10 years. Now is the time to step up its Green Choice marketing effort. This should be a Task Force recommendation.
- e. Nuclear Power - AE currently owns nuclear power (STNP) and will continue to own it in the future per the AE plan. This is a near zero carbon, reliable and affordable source of base load power.
  - i. The current AE plan doesn't provide for any nuclear additions. This needs to be reconsidered and seriously studied further; especially as new nuclear opportunities continue to arise. The plan should not prevent this serious consideration from happening at any point in the future.
  - ii. The STNP project is the cheapest source of electricity for AE ratepayers. With its life expectancy of as much as 60 years, it doesn't have to be replaced every 20 – 25 years as is the case with PPA purchases (i.e. – recent bio mass plant). In the long term, this brings significant value to AE ratepayers. Since the AE

generation plan only extends through 2020, the long term value of this type investment is not being adequately weighed against the short lived PPA options currently under consideration.

iii. The Task Force should recommend nuclear continue to be considered as a viable plan option.

f. Plan Impact to Customer Bills

- i. Impacts to customer bills (\$ or \$/kWh) need to be estimated and made available to customers as part of the AE generation plan development/revision process. The impact should represent all cost elements and be consistent among generation types. Recent cost information provided is often confusing or misleading from this standpoint.
- ii. Anticipated bill impacts should be made available in the early planning and decision making stages of implementation of specific plan elements, not at (or after) EUC or City Council approval votes. Bill impact, more than anything else, helps customers understand the economic impact of actions under consideration. AE's ability to provide this type information in a timely fashion needs to significantly improve. The Task Force should study this issue and make specific recommendations as to how this can happen.