Memorandum

Date: August 12, 2005

To: Sam Rashkin and Jon Passe, EPA

From: Steve Saunders and Steve Ellison, TexEnergy Solutions

Re: Comments on Revised 2006 ENERGY STAR specifications

Sam and Jon,

Thanks very much for all your hard work and leadership on ENERGY STAR for the future. We have read your revision commentary very carefully. We have printed and read all the commentary submitted as part of your thought process in developing the commentary that we are addressing today.

For the most part, we agree with your reasoning. Where we don't agree, we believe that there are reasonable grounds on both positions. We understand that this is a national program so we may hold certain elements dearer – simply because the local issues are more important to us.

In total, we believe that you have done a good and fair job.

Mostly, our focus with this memorandum is timeframe, uncertainty and the risk/reward of hard cutoff on July 1, 2006 vs. January 1, 2007.

Our Core Belief: We believe that a hard cutoff on July 1, 2006 is too soon given the magnitude of the change, the amount of uncertainty and the timeframe for when information may be available and the resulting time then to get pricing, make decisions, choose trade offs, order product, fill the supply chain, confirm delivery and certify for July 1. We will attempt to present logical and orderly appeals related to how the compression of time and information may keep builders out of the program who might otherwise continue to participate. But, independent of logic, our gut reaction is that we need until January 1, 2007 for a hard cutoff date.

We, who are close to the customer, believe the proposed deadline is too short. Our customers have many priorities. They have many fears. They have many issues. When ENERGY STAR become a burden and not an asset, it is easier for them to move on to some other program/problem/issue. Our heart tells us that we will lose significant momentum.

This is a voluntary program. Your volunteers are telling you to slow down for 6 months. We think the eventual reward will be worth the wait.

Now for our reasoning on the time issue:

Let's start with Positioning:

In the ENERGY STAR for HOMES business strategy you focus on 3 key points:

- Develop a strong distribution / sales chain
- Ensure compelling value propositions
- Continually Improve

Later you describe the "Business Model" where the distribution chain included Utilities, HERS Providers and State Administrators and the primary sales force are HERS Raters. You identify the core customer as the homebuilder.

This is a plea to listen to your distribution chain, your key sales force and your core customer. We need more time to implement this change. A hard cap on meeting the new requirements for July 1, 2006 cause more harm than the gain.

We hear repeatedly that this is a voluntary program. We agree. We also believe that your volunteers are saying, *please give us more time*.

TexEnergy has invested a tremendous amount of time as well as emotional and business development effort towards helping builders participate in the ENERGY STAR Program. Other Raters and Providers in our state have equal efforts and investments. TXU and CenterPoint have invested millions of the ratepayer's money working to effect market transformation. Many builders have put a significant effort towards training (themselves and their installation contractors), changing their systems, improving the products they put in their homes and building a better home – in part or in total pushed by the ENERGY STAR effort. While the market has not been "transformed", it has been moved significantly. It takes so much effort to overcome inertia. We have all collectively made huge progress. In combination, we have been a very strong distribution chain for the program. Today's Texas home is dramatically more energy efficient than in 2002.

The business world is changing; the energy world is in complete transformation. The HVAC world is about to enter the most dynamic period for the last 30 years (if not ever). We have just completed 3 tumultuous years in Texas where builders were torn from their historical building practices and into a world dominated by standards, testing, rating, and building science. Much change has happened. Much change is in process. There is so much change that builders who might want to participate, or who might be cajoled or pushed or partially financially induced into participating might just throw up their hands and say it is not worth it. What will happen with interest rates? What happens if job creation slows? What happens if credit standards tighten? What happens when all three hit a builder at the same time?

<u>**There is no doubt in our mind that at some point, there needs to be a fish or cut bait decision!**</u> Are builders with the program or not? Will they make the investment to build ENERGY STAR or not? We understand. We agree. We just think the best choice for that date to be January 1, 2007.

We are clear that there will be more builders who opt in to ENERGY STAR if we can have 6 more months to understand, plan for and then make the transition.

ENERGY STAR Distribution Chain:

- Utilities: The firm July 1 date, puts undue burden on their program:

1. What is their program for 2006? Is it the new standard from January 1? Is it the old standard until July 1 and then the new standard?
2. How difficult is it to have two programs?
3. What is the fallout from their program having a Jan. 1, 2006 hard date, or the fallout from a July 1, 2006 hard date?
4. Are they better off planning to invest their dollars elsewhere?
5. Do they have the money and the resources to pay for a split program year?
6. What damage to their State Implementation Plan (SIP) credits will result from an incorrect decision or from insufficient resources?
7. What happens to the regulated utility managers who say they can deliver mandated energy emissions savings from a program and later cannot deliver?

Should we take the risk of a negative answer to these questions? How do we keep the momentum from the millions they invested? All parties agree that it would be pretty big impact if utilities pulled out of program sponsorship. What if they decided to just pull back? That could significantly reduce momentum as well.

You identify utilities as the key. They are clearly the driving force behind the Texas explosion in ENERGY STAR certifications. *Have you listened and heard their concerns and their issues?* They keep a low profile. They do not make loud pronouncements. They do not write 8 page memorandums on the subject. But, I can assure you that this issue complicates the life of the utility manager.

Make no mistake; the impact of utility incentives has been the fuel of the Texas ENERGY STAR effort. Losing their support would cripple the effort on an ongoing basis.

- Providers and Raters – a complicated position with our very credibility on the line:
    1. How do we advise our builders? What is the commitment they should make? How much money will the new ENERGY STAR standards cost? Is the impact on sales, customer satisfaction and public image sufficient to be worth the investment?
    2. Part of the problem for us is that we have identifiable costs associated with the program and unquantifiable benefits. What is the right step for builders? Without knowing the complete picture, it is impossible for us to give them fact-based recommendations.
    3. For those builders on the fence, how do we keep them interested and motivated to continue to pursue the program during the turmoil to come? This is difficult when we cannot quantify the impact.

- Builders:
    1. Who decides to spend more money in a home? Mostly, it is the Director of Purchasing. All costs have to go through purchasing. One difficulty is the system. Purchasing Managers get rewarded on cost they take out of a home and penalized for money they add.
    2. We have some very strong and committed Directors of Purchasing. They like the ENERGY STAR Program and believe in the benefits. But, they struggle to sell programs where the costs are unknown. Purchasing jobs – by their very nature – are unstable. Uncertainty on the program creates undue difficulty for the

purchaser who wants to build ENERGY STAR. Uncertainty and time compression are arrows that the unbelievers shoot at our allies.

3. There are many competing priorities. Time compression takes away flexibility. **It penalizes our allies and rewards the skeptics.**

- State Administrators: Our Legislators and State and Local Administrators have come to see that building above code homes is part of the solution to the Air Quality issues of North and South Texas.
  1. Our State Administrators need many actions to help on emissions reduction. Energy Efficient new home (lead by the IECC and the above code performance from ENERGY STAR) has been a huge benefit in meeting the State Implementation Plan (SIP). Moving too soon can take away builders, which take away from our progress against the goal.
  2. NTCOG – North Texas Council of Governments: This organization is an affiliation of the 40+ municipalities in North Texas – most of which are in non-attainment areas. They have a vested interest in above code building – for emissions issues. ENERGY STAR is a convenient "handle" for them to wrap programs around. The impact of the Frisco Green Building program – with ENERGY STAR as the centerpiece has been huge. The city of Fairview copied the Frisco Program word-for-word for their new ordinance. Over the next 3 years, it is likely that more cities will adopt Green Building Standards. Don't kill the momentum that has been built and push the cities to adopt some other program.
  3. The Texas Legislature: In the spring of 2005 the Texas Legislature mandated that the Energy System Lab at Texas A&M identify three methods for builders to build 15% above the code. ENERGY STAR needs to be and will likely be the first method. We anticipate it to be the best method and the method that helps us all the most.

If EPA decides the strategy is still "develop a strong distribution / sales chain", then please focus on which implementation dates helps support that strategy.

Schedule Compression:

- Building Schedule: From slab to final – fast schedule 74 days / 15 weeks (sales to mostly first time homebuyers – 1200 to 3000 sq. ft.), slower schedule 100 days / 20 weeks (2200 to 4000 sq. ft. – mostly to move up buyers). These are rough averages across our builder base. Some homes could be done faster and some could be significantly slower.
- Building Schedule: Permit to slab: This number can vary from 3 to 6 weeks based on the variables. The variances in date depend on city issues, lot preparation, utilities and (a huge variable) weather. It is reasonable to use one month as an average.
- Production Builders generally have their homes fully specified (on product issues) prior to permit. They need to know what they are building and what it costs so that they can properly determine the sales price.
- Permit to completion is, on average, 6 to 7 months.
- A July 1, 2006 hard deadline for the new ENERGY STAR specifications mean that most builders must have all their decisions finalized by January 1, 2006.
- If you speak to the professional purchasing managers, you will know that this is unlikely.

- The risk of this hard date is that all those heading towards ENERGY STAR / above code building may stop and you only get the ones who have firmed up their commitment already.

Uncertainty exists:

HVAC Uncertainty:

We believe that there is considerably more challenge to the 13 SEER transition efforts than most public presentations seem to communicate. Because of our historical experience, we believe that we bring an unusual amount of knowledge in this area. Our sister HVAC Company (Tempo Mechanical) participates heavily in the Residential Construction Production Home Builder market in North Texas. We will purchase and install over 6000 HVAC systems in new homes in 2005. We are considered a sophisticated contractor, a good customer and a competent installation and service company. We are recognized as a contractor who pays their bills to terms and resolve their homeowner service issues in a timely fashion. Most suppliers would like us to buy from them. As of the date of this memorandum:

- Our HVAC Installation Company has no pricing on 13 or 14 SEER equipment for 2006.
- We have no confirmed product data showing size or performance (sensible and latent capacity) for any product from any manufacturer.
- The first available product literature (which literally arrived this week) showed Bryant 14 SEER Heat Pumps with an 11 EER. But, it does not show which indoor unit it is matched with or if there are combinations that will get you 11.5 EER.
- The EPA finally published the final equipment specification for ENERGY STAR outdoor units on August 2, 2006. Clearly, the push to an 11.5 EER was a result of HVAC manufacturers indicating that the 12 EER was problematic.
- The decision on 14 SEER as a standard for Production Builders could very easily hinge on who (if anyone) can get 14 ARI performance out of a single speed air handling unit with a matched condenser. To pay for both an upgraded indoor and outdoor unit to meet the 14 SEER could be too much.
- Builders are already reeling from the upgrade expense to 13 SEER. Part of their frustration is that they do not have the final cost for 13 SEER and far behind that answer will be the 14 SEER.
- Carrier Corporation trumpets its $250 million investment in its new platform. But, have you noticed that shipments of that product begin on March 1, 2006. The President of Carrier North Texas has confirmed that we cannot expect to purchase product for installation until at least April 1, 2006 – because they will need to build inventories to support the expected demand. If the products will not be available until April 1, 2006 at the earliest, then how can we expect them to be in homes at the same time?
- We are sure that the 13 SEER products will arrive in March of 2006. No one can answer questions about the delivery dates for 14 SEER systems (indoor and outdoor – it is our assumption that you want the systems to match).
- Final order dates for the current product are late August or early September. Some products have already passed through the final order date process.

- There is no way to tell what 13 and 14 SEER products will be available. Almost no HVAC distribution company is making a big investment in stocking a large supply of existing 14 SEER units in anticipation of a massive switch from production homebuilders. There is no way to predict how homeowner demand may dictate HVAC outdoor unit SEER in the first quarter of 2006.
- Are ratings needed for ENERGY STAR scoring when you match Brand Y indoor unit with a 14 SEER outdoor unit from Brand X. Do you think that manufacturers will want to rate the new product with all their old air handlers and coils?
- Is it reasonable to ask HERS Raters to confirm the matched combination of indoor and outdoor units and confirm that they really meet a 14 SEER? Is it likely that raters will have the systems in place, the knowledge and the desire to effectively assume \ responsibility for this key component?
- TXU requires an outdoor model and serial number to qualify for their incentive. But, all manufacturers have units with a hangtag 12, 13 or 14 SEER rating where the ARI rating is considerably less. You can find 16 SEER hang tag equipment with actual performance barely over 12 SEER. What is it that you really want and really require?
- HVAC Manufacturers believed that the 13 SEER NAECA standard would be overturned. It was spring of 2004 when Carrier and ARI threw in the towel and said, we will do the 13. All have rushed their product and engineering through the process. Do you think that there might be any performance and/or product quality implications from this rush?
- The HVAC Manufacturers have big changes to make to hit the performance, quality and production needs of moving their entire product to 13 SEER. Having ENERGY STAR at 14 is good for them. But, it is not their core opportunity. If they muff the 13, they are out of business. They must put their primary focus on meeting their core obligation. They want and need to do 14 SEER. But, it must come separate. Give them time. Give us time.
- Given the pressures and the compression of the 13 SEER schedule, it is prudent to give HVAC manufacturers, HVAC Contractors, HERS Raters and Builders 6 more months to make the deal work. At present, the July 1, 2006 implementation date is asking too much of the channel.

Software Uncertainty:

- We do not know exactly when RemRate will have their revised product available.
- We do not know how easily it will be to download existing data and existing libraries to the new product.
- We do not know how easy it will be to learn the best and fastest ways on how to use the new software.
- It would not surprise us if there were some difficulties with parts of the programs.

Performance Path Uncertainty:

- We do not know what combination of improvements will allow each builder customer to meet the new performance requirements.
- Everyone will want to know – and all want to have first runs of data on their most popular plans the same week the software arrives.

- In the rush to satisfy customer requirements (and because of the time compression) mistakes will be inevitably be made. We may score plans too high – leading to a false "go" decision or too low – leading to an early exit from participation.
- Regardless of the score, there will have to be many variations run to determine (for production builders) what the best-cost value decisions on points are.
- How will all the variables impact the score:
    - Window to wall or floor area ratios
    - Window ratings
    - Insulation ratings
    - Wall assembly
    - Do ENERGY STAR Thermostats add points to the score
    - What is the variance based on climate zone – how will that impact score and statewide building standardization and statewide purchasing contracts
    - We could go on for a while …

Window Uncertainty:

- What is the current deal that builders have with their window supplier? Have they made commitments to get the right low e windows at the right price over the last 3 years that would prevent them from switching to an ENERGY STAR window in Climate zone 3?
- Can anyone make a .4/.4 window with aluminum and not vinyl?
- If builders ordered in high volumes and at the last minute, are the fenestration companies prepared for a rapid ramp up?
- Is a .4/.4 window a little too good for North Texas? What about a phased implementation of that over time?
- At present, no one really knows?

The ENERGY STAR strategy is to deliver a compelling value proposition. We need time for the value part to improve. Costs are too important in the Texas market. Our market still lags behind other areas of the US.

Building costs have increased greater than sales prices. Builders in Texas have undergone significant margin compression – as had the entire building supply chain. Our collective homebuilder customer is in a difficult fight to sell homes and to deliver unit count and margin dollars to their corporate parent. Land is plentiful and development is relatively unrestricted. There are not artificial restrictions on demand – so the pressures on prices remain critical for our Builder Partners. We must help give them an improved value proposition to choose our program vs. one of the many they are offered every day.

You have worked so hard and so diligently on the program to meet so many diverse needs. The effort itself confirms for us that you are deeply committed to the continuation of this program. Our goal with this memorandum is to highlight just how important your actions are to us here in Texas. We want you to achieve your goal. We have elected to be your partner. We have worked hard and diligently to build the value of ENERGY STAR.

In summary, there are many issues that must be resolved. We do not believe that there are sufficient lead times that allow for the best decisions to be made. The new guidelines will separate those who want to participate from those who will not make the investment. At this moment, there are more building companies in the center than on either extreme. The program can go either way.

All of us in the channel have a vested interest in continuation. There are significant risk/reward issues involved. We firmly believe that market forces will dramatically increase the demand for more energy efficient homes in the future. Today, we have momentum driven by the cities, by the state, by the investor owned utilities, by air pollution failures, increasing energy costs and by the desire of people to participate in environmentally sensitive activities. We implore you to give us more time.

If you do, we promise to deliver more ENERGY STAR HOMES!