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COMMENTS OF THE TEXAS DEMAND RESPONSE COALITION ON
"COMPOSITE" RESOURCE ADEQUACY POLICY OPTIONS

The Texas Demand Response Coalition¹ is pleased to provide its comments on the two "composite" policy options described in the Brattle Group's recently filed presentation.

Introduction

Brattle Group's excellent work in this docket has shown that demand response is the key to meeting ERCOT's resource adequacy needs since it can be deployed quickly, is flexible, reliable and can provide less expensive capacity than generating resources.

Our analysis supports this conclusion. It shows that demand response could ultimately provide over 7000 MW or 10% of ERCOT's total capacity needs. (See Appendix A for a breakout of demand response potential by market segment). Demand response has proven in other markets to be highly reliable with excellent performance characteristics. (See Appendix B for performance standards in other markets).

We believe that demand response can meet ERCOT's reliability needs under either of the proposed "composite" models if the Commission adopts an appropriate

¹ The following companies in the Demand Response Coalition, which consists of the leading national demand response service providers and technology companies and represents most of the U.S. demand response industry, are sponsoring these comments: Acclaim Energy Advisors, Comverge, Consert, Energy Curtailment Specialists, Inc. Grid, EnerNOC, North American Power Partners and Viridtiy Energy.

market design that incents customers to participate in DR programs. In our prior comments, we have suggested some specific policies and actions the Commission should take to achieving high levels of customer participation in demand response. We also have previously recommended that the Commission, rather than the ERCOT stakeholder process, should drive the development of the policy environment for demand response and that this work should be initiated as soon as possible in order to provide a clear path forward for demand response.

We now summarize and apply these principles to the “composite” models.

Under the energy-only market design alternative, the existing market design would be supplemented by a backstop procurement of DR resources and/or more procurement of operating reserves. (Brattle at 7). We have several comments on this model. First, our analysis in Appendix A shows that significant DR is available to support an Energy Only market design. In order to enable the ERCOT market to capitalize on this DR resource, we suggest that the PUCT adopt a “best practices” DR product that is based on our experience in working in other electricity markets where demand response has grown rapidly. In addition, the Coalition believes that the design of any DR-specific program adopted by the Commission must be consistent with the competitive principles in PURA and Commission rules. In this regard, we have concerns about one of Brattle’s recommendations.

Under a forward capacity market alternative, DR can be an important reliability resource, similar to its role in other regions of the country. However, the PUCT will need to develop the appropriate framework for DR participation and our “best practices”

product represents such a model. The Coalition also notes that under this option a transitional DR product will be required as a bridge to the capacity market since Brattle's timeline shows that a capacity market could be operating in 2015 but "by 2015, a significant shortfall is projected relative to current 13.75% target." (Brattle at 8). In addition, such a product can help mitigate the transitional risks discussed by Brattle. (Brattle at 17 and 32).

We now discuss in more detail our specific comments on the Brattle Group's recommendations on each of the "composite" policy options.

Specific Comments on the Brattle Group's Recommendations on the "Composite" Models

- Energy Only Market Design with DR Response Backstop Procurement

Under the "energy only" market design, we have comments on Brattle's recommendations for: (1) a demand response backstop mechanism and (2) higher operating reserve procurement.

In connection with the demand response backstop mechanism, Brattle suggests three different ways for acquiring additional demand response from residential customers. (Brattle at 9). The Coalition has concerns regarding one of the alternatives (that the ERCOT utilities administer a residential DR program) since it is inconsistent with the statutory retail market design in PURA, which requires that competitors, rather than utilities, deliver competitive products and services. ERCOT differs significantly from all other retail electricity markets in that the ERCOT utilities have no load serving responsibility or direct connection with the customer. Moreover, they are prohibited from providing competitive energy services under PURA Section 39.051 which requires

the separation of regulated services from competitively available services. The Commission has adopted broad rules on competitive energy services that preclude utilities from providing such competitive energy services. Sub. R. 25.341 and 25.343. Therefore, this particular recommendation is not consistent with ERCOT's retail market design.

In addition, there are practical reasons why this approach should not be adopted. While utilities interact with customers in other markets and they have an advantage in deploying DR programs because of this customer connection, the ERCOT utilities do not have direct customer contact and, therefore, the Brattle Group's assumption that a TDU program would be "simpler and possibly faster" would not hold true in ERCOT. REPs and third-party DR providers operating in ERCOT should be the vehicle for developing DR programs since they are accustomed to working with customers and since this mechanism would be more consistent with the ERCOT market design.

While the Coalition does not support utility-administered DR, the DR Coalition would support allowing the utilities to fund equipment through their energy efficiency programs as a way to accelerate the rapid deployment of devices to facilitate DR in the small commercial and mass markets. As the Brattle Group appropriately recognizes, additional steps may be necessary to encourage increased residential and small commercial customer participation in a demand response program than are required for larger customers. In particular, the Coalition concurs that a key limitation to residential and small commercial customer participation is the cost of necessary control equipment

(Brattle at 9-10) and that this will need to be addressed in order to enable increased participation by these customers.² Similarly, the PUCT and ERCOT should adopt rules consistent with this effort, such as enabling the value of DR devices to stay with the REP or DR provider who invest in them and incorporating the offers of energy by load into the SCED system.

- Energy Only Market Design with Increased Operating Reserves

Brattle also discusses procuring additional operating reserves in order to create additional intervals in which resource shortages would arise and prices would rise. (Brattle at 13, 14).

The Coalition believes that this alternative would inhibit demand response participation due to the significant barriers to entry raised by the highly technical requirements for these markets. While the ERCOT staff and stakeholders are pursuing ways to provide for additional DR participation in operating reserves, these markets as currently designed will not likely result in significantly more demand response because the technical requirements make it impractical or too expensive for most customers to participate. If the Commission does increase operating reserves, it should include a requirement that ERCOT expand DR resources' eligibility to participate in the reserve markets. Adopting a requirement to procure additional reserves without opening the reserves markets to DR on a broader basis would significantly increase the cost of this option and require the Commission to address and monitor market power in these

² Such programs could be developed that are consistent with the current retail market design and would not require that the utilities run the program. In fact, the utilities have already taken steps toward developing such programs for residential and small commercial customers. For example, CenterPoint has had a successful residential pilot program that could be expanded and would be consistent with the existing retail market design.

markets.

- Texas Capacity Market

Under the forward central capacity market alternative, the Coalition believes that DR can be an important reliability resource and participate in the capacity market structure, just as DR participates actively in forward capacity markets in other regions of the country. The Coalition would, however, raise several issues with Brattle's discussion of a capacity market alternative.

First, the Brattle Group implies that "limited DR" does not have "as much [value] as traditional generation resources." (p. 25). The Coalition disagrees with this assessment. In ERCOT and other wholesale markets, DR has shown that it can have as much value as traditional generation in meeting system operating needs. It is a fundamental truism that the electric market requires a balance of capacity and demand at all times. As a result, just as the addition of a MW of energy to meet demand may maintain that balance, so too may the reduction of a MW of demand maintain that balance. In addition, the Coalition also would caution against any effort to stratify the capacity market. Such segmentation would disincent customer participation in DR and increase costs by relying on generation even if DR were more cost-effective.

Second, the Coalition agrees with the Brattle Group that supply side DR will require "clear product definition, obligations and measurement and verification" and we have provided a framework for that product in Appendix C. However, the Coalition does not fully support some of the Brattle Group's specific recommendations, such as reconstitution or limitations on peak load contribution. (Brattle at 28-30).

Third, Brattle notes that capacity markets have high implementation complexity (Brattle at 37), but that “timing is crucial” for resource adequacy since ERCOT needs “substantial new resources by 2015.” (Brattle at 39). Accordingly, we recommend that the Commission adopt an interim DR product to help mitigate many of these transitional risks and help lay the foundation to build upon for the long-term development of DR resources.

Thus, we propose that the Commission develop and implement a “best practices” DR product and discuss the characteristics of the product in the next section.

“Best Practices” Peak Load Demand Response Product

Under either composite option, a new DR product which is focused on meeting peak demand will need to be developed (or alternatively, significant modifications could be made to the current ERS program). In addition, as discussed above, the Coalition believes that a new demand response offering will be required to serve as a ‘bridge’ under a capacity market as a “stopgap” measure to maintain ERCOT’s 13.75 percent reserve margin target and that this new product could serve to mitigate those transitional issues.

Given these requirements, the Coalition has developed a peak load demand response product with the following characteristics:

- Focused on summer, weekday afternoons.
- Competitively procured through an auction process.
- Clear definitions and limitations on deployment obligations.
- Payments should come from the existing authorization of up to \$50 million for the ERS program or from a request to the PUCT for additional funding if required.
- ERCOT should be directed to reach a total of 1000 MW in the ERS program and the Peak Load program by the summer of 2014.

- ERCOT should do an evaluation of the new peaking product and how to improve it in time for 2015.

(See Appendix C for complete product details).

We believe that this proposal would encourage broad customer participation in DR while meeting ERCOT's reliability needs. First, a summer peak load DR program focuses on weekday summer afternoons when ERCOT's resource adequacy needs are greatest and when loads of all classes most likely will be able to participate in a demand response event. Second, greater certainty regarding deployment obligations (such as number of deployments per contract period, length of deployments, and advance warning for dispatch notices) also increases participation since customers know the limits of their obligations. Third, the certainty of some form of capacity payment is an important attribute, especially for residential, commercial, institutional, and smaller industrial customers for whom participation in DR is secondary to their primary business activity. Every electric market that has had significant DR penetration to date has had some form of capacity payment that provides the participating load some certainty as to the compensation they can expect to receive through their participation in a DR program.³

Finally, the Coalition urges that the Commission open a docket to undertake these crucial tasks rather than delegate them to the ERCOT stakeholder process, since the ERCOT stakeholder process has continually shown antipathy to DR and since

³ In adopting this recommendation, the Commission should not subsume the current ERS services and TDU load management programs into the new peaking product until the new product is up and running and thoroughly tested so that the existing ERS and load management resources remain available to meet ERCOT's needs for system reliability and customers providing demand response services are not stranded without an option to continue to participate as demand response resources.

curtailment service providers are not represented on any of the voting stakeholder committees at ERCOT.

Conclusion

The Texas Demand Response Coalition looks forward to working with the Commission, the Commission staff and ERCOT staff in making changes required to unlock the true potential of load resources to contribute to reliability in the ERCOT market.

Respectfully Submitted,
Texas Demand Response Coalition

A handwritten signature in black ink, appearing to read "Brett Perlman", with a long horizontal flourish extending to the right.

By: Michael Jewell
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Appendix A

ERCOT Demand Response Market Size Estimates

The Coalition provides the following estimates of demand response potential in the ERCOT market, based on market size data obtained from ERCOT. Estimates for average load reductions and end state penetration are based on the experience of members of the Coalition in various markets.

Sector	Total Available ERCOT Market (MW of peak demand)	Assumptions		ERCOT's Demand Response Potential (MW)	Percent of total available ERCOT market segment
		Average Load Reduction	End State Demand Response Penetration		
Residential	35,258	30%	25%	2644	8%
Small Commercial (<50-300 kw)	13,041	20%	25%	652	5%
Commercial (300kw-2MW)	9,636	30%	50%	1445	15%
Industrial (2MW+)	9,190	50%	50%	2298	25%
Total	67,125			7,039	10%

Notes:

- Market penetration likely to be 1000 MW/year if the value of curtailment is similar to PJM's RPM market
- Higher market penetration could be achieved through:
 - Higher capacity payments or a credit for hourly performance in actual events.
 - Access to customer demand records for targeted recruitment
 - Shifting "oversupply" of industrial customers bidding into ERCOT's Load Resources program into a peaking program

Appendix B

Demand Response Performance

The Coalition provides the following information on demand response performance:

ERCOT

Date	Average Load Reduction	Max Load Reduction	Average Fleet Obligation	Results
February 2-3 2011	557	692	426	136%
August 4, 2011	497	547	407	122%

Source: ERCOT's 2011 Annual ERS Report to the PUC in Project 27706 (August 4 data) and ERCOT DSWG presentation, dated April 28, 2011 (Feb 2011 data)

PJM

		Committed	Delivered	excess	percent
2009-10	test	7,089	8,387	1,299	118%
	Event	0	0	0	
	Total	7,089	8,387	1,299	118%
2010-2011	test	5734	6358	624	111%
	Event	2725	2720	-5	100%
	Total	8459	9078	619	107%
2011-12	test	8860	9521	661	107%
	Event	2296	2097	-199	91%
	Total	11156	11618	462	104%
2012-13	test	na	na	na	na
	Event (reported)	3105	na	na	104%
	Total	na	na	na	na

Appendix C

New Planning Reserve Demand Response Program

The following details are for illustration and can be adjusted:

1. Summer only (June-September)
2. Weekday afternoons only (1-7 pm)
3. Maximum Daily Dispatch/Event Duration – 4 Hours
4. Minimum one-hour dispatch notice; two-hour dispatch notice would be preferable; consider day-ahead notification.
5. Maximum of 10 dispatches, 4 hours each, with ERCOT granted authority to renew DR contracts for one or more additional terms within the same contract period upon the agreement of the demand response resource.
6. Dispatches based on expected ERCOT system conditions (such as an anticipated tight reserve margin).
7. Payment by standby/option/capacity payment similar to ERS currently
8. Price of payment competitively determined, with all resources paid same dollar per megawatt price
9. Payments to come out of existing authorized \$50 million budget for ERS, with ERCOT seeking additional funding if remaining ERS funds are insufficient.
10. Allow participation by commercial, institutional, industrial and residential aggregations.
11. Payments based on actual curtailment and test amounts
12. Mechanism to prevent any energy price suppression.