



# MEMO

**Date:** January 9, 2007  
**To:** ERCOT Board of Directors  
**From:** Steve Byone & Ron Hinsley  
**Subject:** Nodal Cost Recovery Surcharge Filing

## **Issue for the ERCOT Board of Directors**

**ERCOT Board of Director Meeting Date:** January 16, 2007  
**Agenda Item No.:** 12a

### **Issue:**

The Public Utility Commission (PUCT) has instructed ERCOT to modify its existing wholesale market structure to implement a nodal design in place of the existing zonal market design. ERCOT began work on the Texas Nodal Market Implementation Program (Nodal Program) once the Nodal Protocols were approved. ERCOT must be able to recover the costs of the Nodal Program in a timely manner and, to do so, must file with the PUCT for approval of an update to the interim surcharge assessed in addition to its approved System Administration fee (Nodal Surcharge). ERCOT staff requests Board approval of the Nodal Program budget and recommended recovery mechanism and requests the authority to make the PUCT filing, consistent with the recommendations of the Finance and Audit Committee.

### **Background/History:**

By letter dated November 22, 2005 ERCOT notified the PUCT of its intention, subject to PUCT approval, to utilize \$5.1 million in unspent funds from the 2005 budget to support the initial costs associated with the Nodal Program. The PUCT approved ERCOT's request at its December Open Meeting. On May 5, 2006, ERCOT requested an interim Nodal Surcharge to be assessed in addition to its System Administration fee to allow the Nodal Program to progress as the Nodal Program budget was prepared.

When considering alternatives for the interim Nodal Surcharge, ERCOT Staff prepared and the Finance and Audit Committee of the BOD reviewed several scenarios for funding the Nodal Program. The scenarios encompassed a range of options available for funding the Nodal Program.

In all scenarios the full cost of the Nodal Program is recovered no later than the end of the estimated average useful life of the assets developed, which is currently assumed to be four years.

- 1) Flat fee – This option anticipated funding the Nodal Program using a blend of borrowed



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funds and a Nodal Surcharge to produce a flat fee for the period from 2006 – 2012 (both the development period and the estimated average useful life of the assets).

- 2) 100% Revenue funding during development – This option anticipated funding all Nodal Program costs during development (from 2006 – 2008)
- 3) 50% Revenue funding during development – This option anticipated funding half of the Nodal Program during development and half over the estimated average useful life of the assets.
- 4) 10% Revenue funding during development – This option anticipated funding ten percent of the Nodal Program cost during development with the balance over the estimated average useful life of the assets.
- 5) 100% Debt funding during development – This option anticipated funding all costs of development with debt with repayment from 2009 – 2012.

The BOD and the PUCT approved an interim Nodal Surcharge of \$0.0663/MWh based on the “flat fee” scenario. This fee went into effect October 1, 2006.

ERCOT staff finalized a Nodal Program budget of \$215.4 million (excluding “Interdependent Projects” and capitalized interest) and presented it to the BOD (see attached summary in Exhibit A). ERCOT staff now seeks BOD approval of the Nodal Program budget and associated debt financing costs of approximately \$33.5 million, the proposed recovery mechanism, and approval to make the necessary regulatory filing to update the interim Nodal Surcharge to recover these costs.

## **Key Factors Influencing Decision:**

There are several key factors that must be considered in determining how to fund the Nodal Program.

- 1) Impact on ERCOT’s financial position. Higher debt levels can negatively impact ERCOT’s balance sheet. Higher levels of revenue funding via the Nodal Surcharge strengthen ERCOT’s balance sheet.
- 2) Overall cost of the Nodal Program. The more debt incurred, the more interest cost must be paid and thus the higher the overall cost of the Nodal Program.
- 3) Matching of the payment for the Nodal Program via the Nodal Surcharge with the benefit from the Nodal Program once it is in place.
- 4) Desire to minimize “spiking” in the Nodal Surcharge. The need or desire to have a consistent, predictable fee that will not fluctuate significantly.



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**Alternatives:**

When considering alternatives for the Nodal Surcharge, ERCOT staff considered the same alternatives that were considered during the interim Nodal Surcharge filing. ERCOT staff believes that the “flat fee” methodology adopted for the interim Nodal Surcharge is appropriate for the revised Nodal Surcharge as well. See Exhibit B for details.

**Conclusion/Recommendation:**

ERCOT staff recommends that the Board approve a Nodal Program budget of \$248.9 million and a nodal cost recovery mechanism based on the “flat fee” methodology as was adopted for the interim Nodal Surcharge. ERCOT staff also seeks approval to submit an updated Nodal Surcharge filing with the PUCT consistent with the above. The Finance & Audit Committee is expected to make a recommendation to the Board following the January 16, 2007 Finance and Audit Committee meeting.



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## **ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.** **BOARD OF DIRECTORS RESOLUTION**

WHEREAS, the Board of Directors (“the Board”) of the Electric Reliability Council of Texas, Inc. (“ERCOT”), a non-profit corporation (“Company”), deems it desirable and in the best interest of the Company for a source of funding to cover the costs ERCOT will incur related to the implementation of the Texas Nodal Market Implementation Program (“Nodal Program”), and

WHEREAS, ERCOT is required to request approval by the Public Utility Commission of Texas (“PUCT”) for ERCOT to collect a fee in the form of a surcharge to be assessed in addition to its System Administration fee (or some other comparable mechanism) to pay for Nodal Program costs ERCOT incurs, and

WHEREAS, the PUCT, in its Docket No. 32686, has ordered ERCOT to file, by January 30, 2007, “nodal market implementation cost information” to serve as the basis for ERCOT’s nodal market implementation surcharge (Nodal Surcharge), and

NOW THEREFORE, BE IT RESOLVED, that the Board hereby approves the budget of \$248.9 million representing costs for the Nodal Program to be financed by the Nodal Surcharge, including the costs of financing the Nodal Program through a combination of Nodal Surcharge revenue and debt financing. The Board finds this is a reasonable forecast of ERCOT’s costs of nodal market implementation, and recognizes that the Nodal Program budget is subject to change as Nodal Program activities progress toward nodal market implementation, and

RESOLVED FURTHER, that ERCOT is hereby authorized to make a filing at the PUCT requesting authority to impose a surcharge or some other comparable mechanism to recover costs ERCOT incurs in connection with the Nodal Program.



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Exhibit A

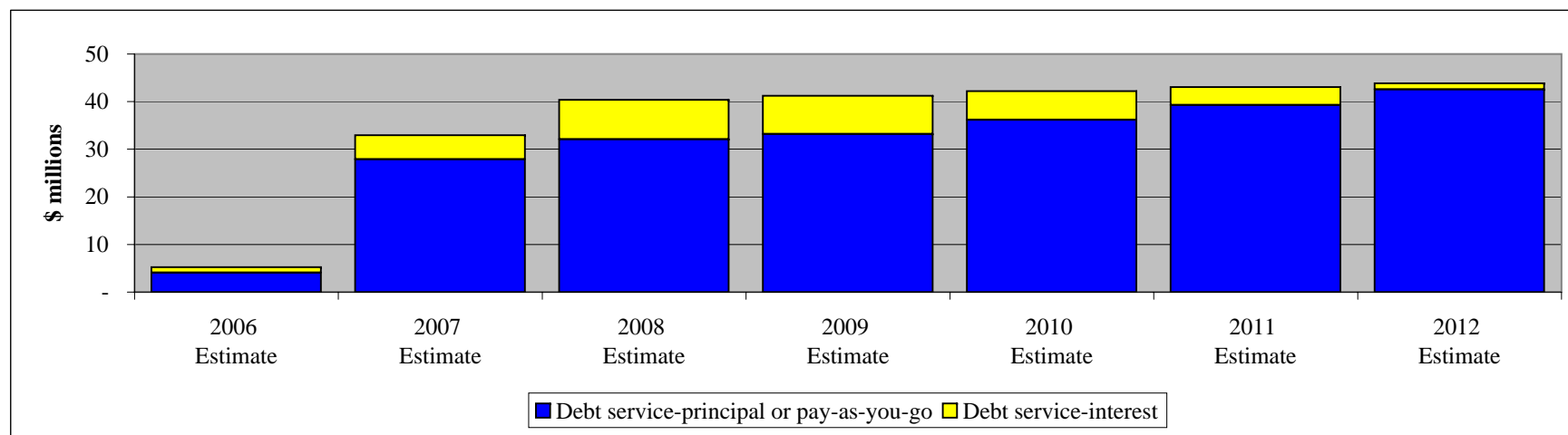
## **Nodal Program Budget - revised estimate of Nodal costs**

|                                       |                         |
|---------------------------------------|-------------------------|
| Estimate for interim fee              | \$ 125.7 million        |
| Underestimated costs                  | \$ 100.3 million        |
| * Interdependent projects             | <u>\$ 37.0 million</u>  |
| Total program budget                  | \$ 263.0 million        |
| Adjustments                           |                         |
| Less: Interdependent projects         | \$ 37.0 million         |
| Less: Capitalized interest costs      | <u>\$ 10.6 million</u>  |
| Nodal costs to be financed            | \$ 215.4 million        |
| Plus: Debt financing costs            | <u>\$ 33.5 million</u>  |
| Costs recoverable via Nodal Surcharge | <b>\$ 248.9 million</b> |

- These costs are assumed to be recovered via the System Administration Fee

**Texas Nodal Market Implementation Program Funding**  
**Flat Fee Option**

**Exhibit "B"**



| Line | (\$Millions)                            | 2006<br>Estimate | 2007<br>Estimate | 2008<br>Estimate | 2009<br>Estimate | 2010<br>Estimate | 2011<br>Estimate | 2012<br>Estimate | Total or<br>Average |
|------|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------------|
| 1    | Debt service-interest                   | 1.1              | 5.0              | 8.3              | 8.0              | 6.0              | 3.7              | 1.3              | 33.5                |
| 2    | Debt service-principal or pay-as-you-go | 4.1              | 27.9             | 32.1             | 33.2             | 36.2             | 39.3             | 42.6             | 215.4               |
| 3    | Total revenue requirement               | 5.2              | 32.9             | 40.4             | 41.2             | 42.2             | 43.0             | 43.9             | 248.9               |
| 4    | GWh                                     | 78.5             | 312.7            | 318.6            | 325.2            | 332.9            | 340.1            | 346.7            |                     |
| 5    | Nodal Surcharge                         | \$0.067          | \$0.105          | \$0.127          | \$0.127          | \$0.127          | \$0.127          | \$0.127          | \$0.127             |
| 6    | Beg Jun 1                               |                  | 0.127            |                  |                  |                  |                  |                  |                     |
| 7    | Incremental Debt Outstanding            | 40.7             | 126.7            | 149.7            | 118.1            | 81.9             | 42.6             | 0.0              |                     |
| 8    |   |                  |                  |                  |                  |                  |                  |                  |                     |
| 9    | (\$ / MWH)                              |                  |                  |                  |                  |                  |                  |                  |                     |
| 10   | Debt service-interest                   | 0.014            | 0.016            | 0.026            | 0.025            | 0.018            | 0.011            | 0.004            |                     |
| 11   | Debt service-principal or pay as you go | 0.052            | 0.089            | 0.101            | 0.102            | 0.109            | 0.116            | 0.123            |                     |
| 12   | Total revenue requirement               | 0.067            | 0.105            | 0.127            | 0.127            | 0.127            | 0.127            | 0.127            |                     |
| 13   |   |                  |                  |                  |                  |                  |                  |                  |                     |
| 14   |   |                  |                  |                  |                  |                  |                  |                  |                     |
| 15   |   |                  |                  |                  |                  |                  |                  |                  |                     |
| 16   |   |                  |                  |                  |                  |                  |                  |                  |                     |
| 17   | Estimated market redesign expenditures  | 44.8             | 113.9            | 55.1             | 1.6              | -                | -                | -                | 215.4               |
| 18   | Revenue-funding for market redesign     | 4.1              | 27.9             | 32.1             | 33.2             | 36.2             | 39.3             | 42.6             | 215.4               |
| 19   | Assumed incremental debt funding        | 40.7             | 86.0             | 23.0             | (31.6)           | (36.2)           | (39.3)           | (42.6)           | -                   |
| 20   |   |                  |                  |                  |                  |                  |                  |                  |                     |
| 21   | Cumulative incremental debt funding     | 40.7             | 126.7            | 149.7            | 118.1            | 81.9             | 42.6             | -                |                     |
| 22   | Average outstanding incremental debt    | 20.4             | 83.7             | 138.2            | 133.9            | 100.0            | 62.3             | 21.3             |                     |
| 23   | Interest rate                           | 5.50%            | 6.00%            | 6.00%            | 6.00%            | 6.00%            | 6.00%            | 6.00%            |                     |
| 24   | Assumed incremental interest expense    | 1.1              | 5.0              | 8.3              | 8.0              | 6.0              | 3.7              | 1.3              | 33.5                |