DOCKET NO. 42122

ERCOT'S ACCOUNTING OF THE AMOUNT AND TIMING OF THE COLLECTION OF THE NODAL SURCHARGE	§ § § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

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COMES NOW, Electric Reliability Council of Texas, Inc. (ERCOT), and pursuant to Public Utility Commission of Texas (Commission) Orders in Docket Nos. 32686,[1] 36851,[2] 38840,[3] 39865,[4] and 40524,[5] files its Accounting of the Amount and Timing of the Collection of the Nodal Surcharge (*i.e.*, ERCOT's "accounting of the amount and timing of the collection of the nodal surcharge within twelve (12) months after ERCOT stops collecting the nodal surcharge."[6]).

I. BACKGROUND

In Docket No. 32686, the Commission approved the creation of the "nodal surcharge" as a special-purpose fee used to fund the costs of implementation by ERCOT of the Texas Nodal Market Implementation Program (TNMIP or Nodal Program). As part of the Commission's approval of the nodal surcharge, it required the following filings after the completion of the Nodal Program:

[1] Docket No. 32686, *Application of the Electric Reliability Council of Texas for Approval of a Nodal Market Implementation Surcharge and Request for Interim Relief*, Order (May 23, 2007), and Order Nunc Pro Tunc (Jun. 13, 2007).
[2] Docket No. 36851, *Application of the Electric Reliability Council of Texas for Approval of a Revised Nodal Market Implementation Surcharge*, Order (Oct. 14, 2009).
[3] Docket No. 38840, *Application of ERCOT For Approval of Post-Go-Live Utilization of the Texas Nodal Market Implementation Surcharge*, Order (Dec. 20, 2010).
[4] Docket No. 39865, *Petition of Electric Reliability Council of Texas, Inc. For Approval of Revision To The Final Order in Docket No. 32686*, Order (Dec. 19, 2011).
[5] Docket No. 40524, *Electric Reliability Council of Texas Accounting of the Costs and Revenues of Implementing the Nodal Market*, Order (Sept. 6, 2012).
[6] *Id*. at 5 (Ordering Para. 2).

> ERCOT shall file with the Commission within 12 months after the Nodal market "goes live" and again within 12 months after ERCOT stops collecting the nodal surcharge an accounting of the costs and revenues of implementing the Nodal market.[7]

In addition to approving ERCOT's accounting of the costs and revenues of implementing the nodal market in its Order in Docket No. 40524, the Commission specified that the second (and final) accounting by ERCOT shall be filed as follows:

> ERCOT shall file with the Commission an accounting of the amount and timing of the collection of the nodal surcharge within twelve (12) months after ERCOT stops collecting the nodal surcharge.[8]

At the time of the Commission's Order in Docket No. 32686 (*i.e.*, May 23, 2007), ERCOT did not expect to expend revenues generated by the nodal surcharge after the nodal market's "go-live" date. Therefore, the Commission and ERCOT expected that a complete accounting of nodal costs could be provided within one year after completion of nodal go-live, with an accounting of nodal surcharge revenues to be provided after all Nodal Program charges (including debt service) were repaid using nodal surcharge revenues.

The "go-live" date for nodal market operations was December 1, 2010. On December 20, 2010, the Commission approved a change regarding the time period in which ERCOT could utilize nodal surcharge revenues. In Docket No. 38840, the Commission approved "post-go-live utilization of nodal surcharge revenues for expenses associated with the transition to the nodal market incurred after nodal go-live on December 1, 2010 (post-go-live charges)."[9] The Commission's Order authorized ERCOT to use nodal surcharge revenues through calendar year 2011 in support of post-go-live expenses associated with ERCOT's transition to nodal operations. In light of the extended time period for use of nodal surcharge revenues, the Commission authorized ERCOT to defer the date of its post-go-live accounting of nodal costs and revenues until July 1, 2012.[10]

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[7] Docket No. 32686, Order Nunc Pro Tunc at 2 (Ordering Para. 1c) (Jun. 13, 2007).
[8] Docket No 40524, Order at 5 (Ordering Para. 2) (Sept. 6, 2012).
[9] Docket No. 38840, Order at 9 (Ordering Para. 2) (Dec. 20, 2010).
[10] Docket 39865, Order at 4 (Ordering Paras. 1 and 2) (Dec. 19, 2011).

As part of the settlement of ERCOT's request for a revision of the nodal surcharge in Docket No. 36851, ERCOT committed to provide information in its nodal accounting filing related to: (a) post-go-live expenditures related to completing or correcting nodal systems; and (b) the "limited issue of whether the Commission should grant an exemption from the nodal surcharge for distributed renewable generation."[11] On July 2, 2012, ERCOT filed its Accounting of the Costs and Revenues of Implementing the Nodal Market, which included the information required pursuant to Commission orders, along with data reflecting the costs and revenues of the Nodal Program.[12] The Commission approved ERCOT's Accounting of the Costs and Revenues of Implementing the Nodal Market, and required that ERCOT file with the Commission "an accounting of the amount and timing of the collection of the nodal surcharge within twelve (12) months after ERCOT stops collecting the nodal surcharge."[13] ERCOT stopped collecting the nodal surcharge on January 1, 2013, and therefore ERCOT's Accounting of the Amount and Timing of the Collection of the Nodal Surcharge is timely filed with the Commission.

ERCOT respectfully requests that the Commission find that ERCOT has complied with prior Commission Orders requiring the submission of this Accounting of the Amount and Timing of the Collection of the Nodal Surcharge. As of January 1, 2013, ERCOT satisfied full repayment of Nodal Program costs, including debt service.

II. CONTENTS OF FILING

ERCOT's Accounting of the Amount and Timing of the Collection of the Nodal Surcharge includes the following documents in addition to this pleading:

A. Exhibit A: Testimony of Mr. Michael W. Petterson, ERCOT Vice-President of Finance and Treasury.

B. Exhibit B: Nodal Program Costs and Resources (Schedules 1-22).

C. Exhibit C: ERCOT Notice.

[11] Docket No. 36851, Order at 16 (FoFs Para. 19) and 20 (Ordering Para. 4) (Oct. 14, 2009).
[12] Docket No. 40524, *ERCOT Accounting of the Costs and Revenues of Implementing the Nodal Market* (hereinafter cited as, "ERCOT Application") (Jul. 2, 2012).
[13] Docket No. 40524, Order at 5 (Ordering Para. 2) (Sept. 6, 2012).

III. P.U.C. PROC. R. 22.73(1) STATEMENT OF COMMISSION JURISDICTION

The Commission has jurisdiction over this Application pursuant to the Texas Public Utility Regulatory Act (PURA) §§ 14.001, 32.001, 36.001, and 39.151. ERCOT is an independent organization, certified by the Commission pursuant to PURA.[14] In this docket, ERCOT submits a compliance filing required by Commission Orders in Docket Nos. 32686, 36851, 38840, 39865, and 40524. In Docket No. 32686, the original docket authorizing the nodal surcharge, the Commission held it had jurisdiction over the subject matter and parties pursuant to the provisions of PURA identified above.[15]

IV. ERCOT'S COMPLIANCE FILING SATISFIES THE REQUIREMENTS FOR THE NODAL ACCOUNTING REQUIRED BY COMMISSION ORDER

A. The Nodal Program Costs and Resources, as supported by the testimony of ERCOT Vice-President of Finance and Treasury Mr. Michael W. Petterson, provides the Commission with a full accounting of the amount and timing of the collection of the nodal surcharge.

The Nodal Program Costs and Resources are detailed in twenty-two (22) schedules in Exhibit B and supported by the testimony of ERCOT Vice-President of Finance and Treasury, Mr. Michael W. Petterson. Pursuant to the Commission's Order in Docket No. 36851, the Commission approved ERCOT's Application for a revised nodal surcharge of $0.375 per MWh, effective January 1, 2010, to enable ERCOT to recover $643.8 million (i.e., the estimated total cost of the Nodal Program, including financing costs of portions of the Nodal Program with debt).[16] Furthermore, in Docket No. 38840, the Commission authorized ERCOT to utilize nodal surcharge funding for "expenses associated with the transition to the nodal market incurred after nodal go-live on December 1, 2010 and through December 31, 2011."[17] The contents of Exhibit B are summarized as follows:

[14] PURA § 39.151(e). ERCOT was certified as the "independent organization" for it region in Docket No. 22061, *Application of ERCOT ISO For Certification As The Independent Organization To Perform Transmission and Distribution Access, Reliability, Information Exchange, and Settlement Functions*, Order (Feb. 2, 2001).
[15] Docket No. 32686, Order at 8 (CoLs Para. 1) (May 23, 2007).
[16] Docket No. 36851, Order at 20 (Ordering Para. 1) (Oct. 14, 2009).
[17] Docket No. 38840, Order, at 8 (Ordering Para. 2) (Dec. 20, 2010).

- Schedule 1: Summary of Nodal Program Costs and Resources
- Schedule 2: Monthly Nodal Surcharge Revenue
- Schedule 3: Summary of Nodal Costs by Major Cost Category
- Schedule 4: Summary of Nodal Costs by Asset
- Schedule 5: Summary of Nodal Costs for Market Management System
- Schedule 6: Summary of Nodal Costs for Energy Management System
- Schedule 7: Summary of Nodal Costs for External Web Services
- Schedule 8: Summary of Nodal Costs for Market Information System
- Schedule 9: Summary of Nodal Costs for Settlements and Billing
- Schedule 10: Summary of Nodal Costs for Network Model Management System
- Schedule 11: Summary of Nodal Costs for Enterprise Data Warehouse/ Enterprise Information Services
- Schedule 12: Summary of Nodal Costs for Congestion Revenue Rights
- Schedule 13: Summary of Nodal Costs for Current-Day Reports
- Schedule 14: Summary of Nodal Costs for Commercial Systems Integration
- Schedule 15: Summary of Nodal Costs for Credit Management Module
- Schedule 16: Summary of Nodal Costs for Registration
- Schedule 17: Summary of Nodal Costs for Market Participant Identity Management
- Schedule 18: Summary of Nodal Costs for Outage Scheduler
- Schedule 19: Summary of Nodal Costs for ERCOT Visibility/Business Service Management
- Schedule 20: Summary of Nodal Costs for Planning Model on Demand
- Schedule 21: Summary of Nodal Costs for ERCOT.com Website Enhancements
- Schedule 22: Summary of Nodal Costs for Program Operating Expenses

The actual cost for the Nodal Program was $544.4 million, which consisted of the implementation and stabilization costs. Of this amount, $504.7 million was funded by the nodal surcharge. The nodal surcharge recovered all Nodal Program costs, except for completion of the "zonal/nodal dependency" projects, which were funded from System Administration Fee (SAF) revenues. The zonal/nodal dependency projects, defined as "projects relating to zonal market operations that are required to be completed before ERCOT can begin implementation of the nodal market,"[18] amounted to $39.7 million and were recovered through SAF revenues.[19]

B. ERCOT previously provided the Commission with estimates regarding a nodal surcharge exemption for Distributed Renewable Generation (DRG) in its Accounting of the Costs and Revenues of Implementing the Nodal Market.

[18] Docket No. 32686, Order at 7 (FoFs Para. 8) (May 23, 2007).
[19] *See* Docket No. 40524, ERCOT Application at 38 (Exhibit B, Schedule 21, Notes, Para. 1) (Jul. 2, 2012).

As part of the settlement of ERCOT's request for a revision of the nodal surcharge in Docket No. 36851, ERCOT committed to provide information in its nodal accounting filing related to the "limited issue of whether the Commission should grant an exemption from the nodal surcharge for distributed renewable generation."[20] ERCOT provided the required information in Exhibit C (Testimony of Ms. Amanda Bauld, ERCOT Director of Settlements & Retail Operations) of ERCOT's Accounting of the Costs and Revenues of Implementing the Nodal Market, as filed with the Commission on July 2, 2012.[21] The testimony of Ms. Bauld,[22] provided the "estimated cost and time required by ERCOT to make the system changes necessary to implement a distributed renewable generation exemption" from the nodal surcharge, as required by Commission Order in Docket No. 36851.[23]

C. ERCOT previously provided the Commission with the information on all remaining issues in its filings in Docket No. 38840, in support of post-go-live utilization of revenues from the Texas nodal market implementation surcharge.

In addition to the DRG issue, the settlement agreement in Docket No. 36851 included a stipulation that ERCOT would provide testimony in its nodal accounting proceeding regarding post-go-live "changes to nodal system functionalities planned to address nodal market design deficiencies, nodal operational system deficiencies, or needed enhancements to the nodal system that are identified within the first eighteen months after the nodal go-live."[24] In ERCOT's Accounting of the Costs and Revenues of Implementing the Nodal Market, filed with the Commission on July 2, 2012, ERCOT submitted that subsequent events overtook this portion of the stipulation, in particular, the Commission's approval of post-go-live nodal surcharge expenditures for nodal stabilization projects.[25]

When the stipulation in Docket No. 36851 was adopted, the Commission's extant nodal surcharge orders did not contemplate that any ERCOT expenditures after the go-live date (other than debt service) would be funded by nodal surcharge revenues. Therefore, the parties in

[20] Docket No. 36851, Order at 16 (FoFs Para. 19) (Oct. 14, 2009).
[21] Docket No. 40524, ERCOT Application at 39-50 (Exhibit C) (Jul. 2, 2012).
[22] *Id.*
[23] Docket No. 36851, Order at 16 (FoFs Para. 19) (Oct. 14, 2009).
[24] *Id.* at 17 (FoFs Para. 21).
[25] Docket No. ERCOT Application at 9 (Jul. 2, 2012).

Docket No. 36851 reserved their rights to ask the Commission to require payment of post-go-live nodal market expenses from the nodal surcharge or from the ERCOT System Administration Fee. The focus of this portion of the stipulation was on repairing problems or implementing needed enhancements identified within the first eighteen months after nodal go-live (*i.e.*, projects identified by June 1, 2012) which, at the time, were not eligible for funding from nodal surcharge revenues.

Coincident with nodal go-live in December 2010, however, the Commission approved ERCOT's request to fund such projects in calendar year 2011 using nodal surcharge revenues. ERCOT's application for post-go-live utilization of the nodal surcharge detailed the "parking deck" initiatives, system stabilization and improvement work, and zonal system decommissioning projects that would be funded during 2011 using nodal surcharge revenues.[26] ERCOT and market participants identified these projects as being necessary to correct "design" or "operational deficiencies" and make the "enhancements" that were referenced in the Order in Docket No. 36851. The eighteen-month period since go-live referenced in Docket No. 36851 passed, and as indicated in ERCOT's Accounting of the Costs and Revenues of Implementing the Nodal Market,[27] ERCOT submits there are no uncompleted projects that would appropriately qualify for continued post-go-live funding from the nodal surcharge.

ERCOT continues to believe that the authorization of post-go-live projects pursuant to the Commission's Order in Docket No. 38840 has been resolved and renders moot the potential issue in this proceeding regarding the funding of parking deck items and other post-go-live corrections or enhancements. ERCOT respectfully suggests that there is no need for additional testimony on this issue, and requests that the Commission find this accounting filing complete without the need to file testimony on the issue.

[26] *See* Docket No. 38840, Application of ERCOT for Approval of Post-Go-Live Utilization of the Texas Nodal Market Implementation Surcharge (Oct. 25, 2010).
[27] *See* Docket No. 40524, ERCOT Application at 9-10 (Jul. 2, 2012).

V. P.U.C. PROC. R. 22.73(2), IDENTIFICATION OF AFFECTED PARTIES

In Docket No. 32686, the Commission determined that the nodal surcharge should be "charge[d] to QSEs representing generation resources, multiplying the surcharge factor . . . by the total net metered generation aggregated to the QSE level."[28]

The allocation of fees supporting ERCOT services is addressed in PURA § 39.151(e), which provides that the Commission "shall authorize [ERCOT] to charge to wholesale buyers and sellers a system administration fee, within a range determined by the commission, that is reasonable and competitively neutral to fund [ERCOT's] approved budget." Furthermore, PURA § 39.151(e-1) provides that "a proceeding to authorize and set the range for the amount of a fee under Subsection (e) is not a contested case."

In this docket, ERCOT does not propose any change in the amount of the nodal surcharge or in the manner or timing of its collection. Rather, ERCOT files an accounting of the amount and timing of the collection of the nodal surcharge in compliance with prior Commission Orders. ERCOT expects that the parties most affected by this filing are those who participated in the now-completed funding of the Nodal Program.

VI. IDENTIFICATION OF APPLICANT

The name and address of the Applicant is Electric Reliability Council of Texas, Inc., 7620 Metro Center Drive, Austin, Texas 78744. The name, address, telephone, and facsimile number of Applicant's authorized representative is:

Bill Magness
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[28] Docket No. 32686, Order at 8 (FoFs Para. 20) (May 23, 2007).

VII. NOTICE

ERCOT will post the documents included in its Accounting of the Amount and Timing of the Collection of the Nodal Surcharge to its website at http://www.ercot.com/about/governance/legal_notices. Additionally, ERCOT will send a copy of this filing via first-class U.S. mail to the parties of record in Docket No. 32686, and to the parties in all other proceedings in which the Commission addressed issues regarding the nodal surcharge (Docket Nos. 35428, 36412, 36851, 38840, 39865, and 40524). ERCOT will also provide Notice of this filing via electronic mail to ERCOT's email exploder lists of committees as follows:

- ERCOT Board of Directors and Others
- Technical Advisory Committee and Others (TAC)
- Retail Market Subcommittee (RMS)
- Wholesale Market Subcommittee (WMS)
- Reliability and Operations Subcommittee (ROS)
- Commercial Operations Subcommittee (COPS), and
- Protocol Revisions Subcommittee (PRS)

A copy of ERCOT's proposed form of Notice is attached as Exhibit C.

VIII. REQUEST FOR RELIEF

ERCOT files this Accounting of the Amount and Timing of the Collection of the Nodal Surcharge, together with the other items addressed herein, pursuant to Commission Orders in Docket Nos. 32686, 36851, 38840, 39865, and 40524. ERCOT respectfully requests that the Commission find that ERCOT has fulfilled the requirements for submitting its second and final nodal accounting compliance filing, as required by Commission Order in the above-referenced proceedings, and that the Commission grant ERCOT all other such relief to which it is entitled.

Respectfully submitted,

By: _____

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ATTORNEYS FOR ELECTRIC
RELIABILITY COUNCIL OF TEXAS, INC.

CERTIFICATE OF SERVICE

I hereby certify that a copy of this document was served on all parties of record in Docket Nos. 32686, 35428, 36412, 36851, 38840, 39865, and 40524 on December 30, 2013 by hand-delivery, electronic mail, or first-class U.S. mailing.

_____

Exhibit A

DIRECT TESTIMONY OF

MICHAEL W. PETTERSON

VICE-PRESIDENT OF FINANCE AND TREASURY

ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

IN SUPPORT OF
ERCOT'S ACCOUNTING OF THE AMOUNT AND TIMING OF THE COLLECTION OF THE NODAL SURCHARGE

DIRECT TESTIMONY OF MR. MICHAEL W. PETTERSON

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael W. Petterson. My business address is 7620 Metro Center Drive, Austin, Texas 78744.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Electric Reliability Council of Texas, Inc. ("ERCOT") as Vice President of Finance and Treasury.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS?

A. Yes. I was a witness in Docket No. 31824 (ERCOT System Administrative Fee case), filed testimony in Docket Nos. 23320, 26827, 28832, 32686, 35428, 36851, 38840, and 40524 (ERCOT nodal surcharge cases), and have presented ERCOT financial and budget updates to the Commission at numerous Open Meetings.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I have a Bachelor of Business Administration degree from the University of Wisconsin at Madison (1985), and a Master of Business Administration degree from the University of Texas at Austin (1991). I am a Certified Public Accountant, licensed in the State of Texas. I joined ERCOT in 2001 as Controller. I am responsible for directing the daily financial affairs of the

organization and preparing financial analyses of operations, including monthly and annual financial statements with supporting schedules. I also supervise ERCOT's general accounting, asset accounting, budget and reporting, financial analysis, and billing and revenue functions.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.

A. In the Commission's prior Orders authorizing ERCOT to collect a special purpose surcharge to fund the Texas Nodal Market Implementation Program (nodal surcharge), the Commission directed ERCOT to file an "accounting of the amount and timing of the collection of the nodal surcharge." I have supervised the preparation of ERCOT's accounting documents, which are filed herewith as Exhibit B to ERCOT's submission in this docket.

Q. PLEASE SUMMARIZE THE CONTENTS OF EXHIBIT B.

A. Exhibit B is composed of twenty-two (22) financial schedules. Schedule 1 provides overall comparison of program costs and resources. Schedule 2 provides the nodal surcharge revenues by month, and indicates the months for which the surcharge rate changed. Schedule 3 summarizes the total cost of the Nodal Program, as organized by major cost category. Schedules 4-22 provide detailed summaries for each of the major assets developed as part of the Nodal Program (*e.g.,* Market Management System, Energy Management System, Outage Scheduler). On January 1, 2013, ERCOT satisfied complete repayment of Nodal Program costs.

Q. DO THE SCHEDULES IN EXHIBIT B PROVIDE A COMPLETE ACCOUNTING OF THE AMOUNT AND TIMING OF THE COLLECTION OF THE NODAL SURCHARGE?

A. Yes, the schedules provide a full accounting of the amount and timing of the collection of the nodal surcharge.

Q. HAS THE INFORMATION IN EXHIBIT B BEEN REVIEWED BY OUTSIDE ACCOUNTING FIRMS OR AUDITORS?

A. The Nodal Program transactions underlying the schedules provided were reviewed by EY (formerly Ernst & Young), ERCOT's independent accounting firm. As part of the 2009, 2010, 2011, and 2012 financial statement audits, EY reviewed revenue and material, and Nodal Program expenditures (including internal labor, external resources, hardware and software purchases, internal allocations, and interest expense). Additionally, as part of the 2010 financial statement audit, EY reviewed the capitalization of Nodal Program costs (as of the date of implementation) into the nodal software assets. As evidenced by the unqualified audit opinions issued in connection with the 2009, 2010, 2011, and 2012 financial statement audits, EY did not identify any concerns with the accuracy of the accounting for the Nodal Program. EY has not reviewed any nodal transactions related to 2013 nor have they reviewed the specific schedules included in Exhibit B.

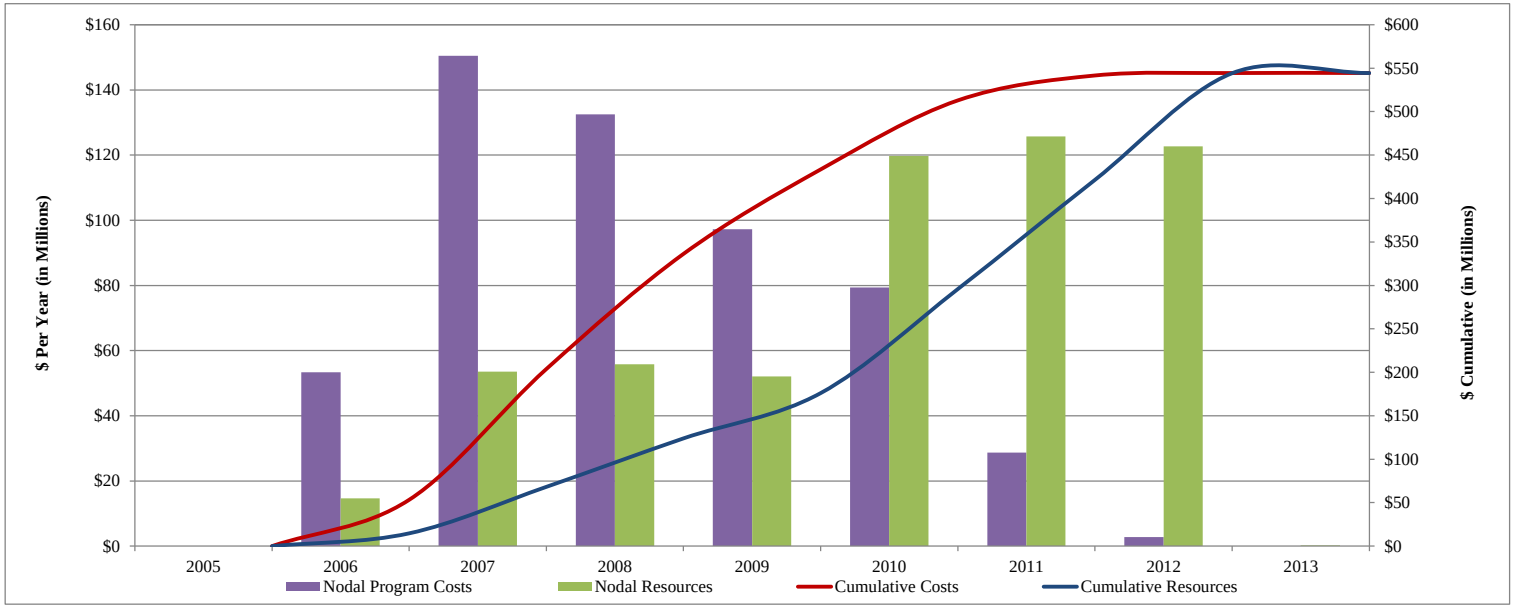
Q. TO THE BEST OF YOUR KNOWLEDGE, IS THE INFORMATION IN THE SCHEDULES INCLUDED IN EXHIBIT B TRUE AND CORRECT?

A. Yes.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 1: Chart of Nodal Program Costs versus Nodal Program Resources ($ in Millions)



	Reference	2006	2007	2008	2009	2010	2011	2012	2013	Total
Nodal Program Resources										
Nodal Surcharge Revenue	*S2*	$ 4.5	$ 32.0	$ 47.8	$ 52.1	$ 119.7	$ 125.7	$ 122.7	$ 0.2	$ 504.7
Zonal / Nodal Dependencies	*	10.2	21.5	8.0	-	-	-	-	-	39.7
Total Nodal Program Resources	*n/a*	14.7	53.5	55.8	52.1	119.7	125.7	122.7	0.2	544.4
Nodal Program Costs										
Cost of Nodal Implementation	*S3*	53.3	150.5	132.5	97.2	76.5	(0.6)	-	-	509.4
Cost during Nodal Stabilization Period	*S3*	-	-	-	-	2.9	29.3	-	-	32.2
Cost after Nodal Stabilization Period	*S3*	-	-	-	-	-	-	2.8	-	2.8
Total Nodal Program Costs	*S3*	53.3	150.5	132.5	97.2	79.4	28.7	2.8	-	544.4
Excess/(Deficit) of Resources Over Costs	*n/a*	$ (38.6)	$ (97.0)	$ (76.7)	$ (45.1)	$ 40.3	$ 97.0	$ 119.9	$ 0.2	$ -
Cumulative Excess/(Deficit) of Resources Over Costs	*n/a*	$ (38.6)	$ (135.6)	$ (212.3)	$ (257.4)	$ (217.1)	$ (120.1)	$ (0.2)	$ -	$ -

** Source Document: Application of the Electric Reliability Council of Texas for Approval of a Nodal Market Implementation Surcharge and Request for Interim Relief; Docket No. 35428, Order (May 13, 2008).*

Electric Reliability Council of Texas, Inc. (ERCOT)

Nodal Program Costs and Resources

Schedule 2: Monthly Nodal Surcharge Revenue

Item	Year	Month	GWh		Nodal Surcharge Rate	Monthly Nodal Surcharge Revenue
1	2006	October	24,628		$ 0.0663	$ 1,632,846
2	2006	November	20,476		$ 0.0663	$ 1,357,561
3	2006	December	23,136		$ 0.0663	$ 1,533,881
	2006	Total	68,240	2006 Avg Rate	$ 0.0663	$ 4,524,289
4	2007	January	25,655		$ 0.0663	$ 1,700,923
5	2007	February	23,010		$ 0.0663	$ 1,525,530
6	2007	March	20,377		$ 0.0663	$ 1,351,010
7	2007	April	21,488		$ 0.0663	$ 1,424,679
8	2007	May	26,187		$ 0.0663	$ 1,736,226
9	2007	June	28,776	*	$ 0.1270	$ 3,654,525
10	2007	July	29,112		$ 0.1270	$ 3,697,183
11	2007	August	33,158		$ 0.1270	$ 4,211,064
12	2007	September	28,376		$ 0.1270	$ 3,603,750
13	2007	October	27,517		$ 0.1270	$ 3,494,674
14	2007	November	20,085		$ 0.1270	$ 2,550,770
15	2007	December	24,284		$ 0.1270	$ 3,084,022
	2007	Total	308,025	2007 Avg Rate	$ 0.1040	$ 32,034,356
16	2008	January	24,127		$ 0.1270	$ 3,064,164
17	2008	February	23,058		$ 0.1270	$ 2,928,339
18	2008	March	23,451		$ 0.1270	$ 2,978,285
19	2008	April	21,250		$ 0.1270	$ 2,698,700
20	2008	May	26,791		$ 0.1270	$ 3,402,395
21	2008	June	35,712	*	$ 0.1690	$ 6,035,391
22	2008	July	29,910		$ 0.1690	$ 5,054,697
23	2008	August	34,026		$ 0.1690	$ 5,750,353
24	2008	September	23,018		$ 0.1690	$ 3,890,042
25	2008	October	25,560		$ 0.1690	$ 4,319,593
26	2008	November	20,905		$ 0.1690	$ 3,532,875
27	2008	December	24,244		$ 0.1690	$ 4,097,287
	2008	Total	312,051	2008 Avg Rate	$ 0.1530	$ 47,752,122
28	2009	January	24,457		$ 0.1690	$ 4,133,295
29	2009	February	19,341		$ 0.1690	$ 3,268,563
30	2009	March	22,819		$ 0.1690	$ 3,856,318
31	2009	April	20,618		$ 0.1690	$ 3,484,415
32	2009	May	26,672		$ 0.1690	$ 4,507,513
33	2009	June	31,333		$ 0.1690	$ 5,295,206
34	2009	July	34,127		$ 0.1690	$ 5,767,507
35	2009	August	33,830		$ 0.1690	$ 5,717,247
36	2009	September	26,340		$ 0.1690	$ 4,451,452
37	2009	October	22,715		$ 0.1690	$ 3,838,794
38	2009	November	20,247		$ 0.1690	$ 3,421,715
39	2009	December	25,865		$ 0.1690	$ 4,371,199
	2009	Total	308,363	2009 Avg Rate	$ 0.1690	$ 52,113,224

Item	Year	Month	GWh		Nodal Surcharge Rate	Monthly Nodal Surcharge Revenue
40	2010	January	57,807		$ 0.1690	$ 9,769,431
41	2010	February	52,660		$ 0.1690	$ 8,899,498
42	2010	March	22,042	*	$ 0.3750	$ 8,265,608
43	2010	April	21,510		$ 0.3750	$ 8,066,292
44	2010	May	27,198		$ 0.3750	$ 10,199,226
45	2010	June	31,801		$ 0.3750	$ 11,925,428
46	2010	July	32,387		$ 0.3750	$ 12,145,268
47	2010	August	35,791		$ 0.3750	$ 13,421,697
48	2010	September	28,833		$ 0.3750	$ 10,812,479
49	2010	October	23,921		$ 0.3750	$ 8,970,275
50	2010	November	21,682		$ 0.3750	$ 8,130,836
51	2010	December	24,298		$ 0.3750	$ 9,111,585
	2010	Total	379,930	2010 Avg Rate	$ 0.3151	$ 119,717,623
52	2011	January	26,255		$ 0.3750	$ 9,845,438
53	2011	February	23,389		$ 0.3750	$ 8,771,033
54	2011	March	22,647		$ 0.3750	$ 8,492,640
55	2011	April	24,613		$ 0.3750	$ 9,230,014
56	2011	May	27,586		$ 0.3750	$ 10,344,582
57	2011	June	33,817		$ 0.3750	$ 12,681,198
58	2011	July	36,358		$ 0.3750	$ 13,634,182
59	2011	August	38,294		$ 0.3750	$ 14,360,179
60	2011	September	29,972		$ 0.3750	$ 11,239,524
61	2011	October	24,692		$ 0.3750	$ 9,259,520
62	2011	November	22,057		$ 0.3750	$ 8,271,182
63	2011	December	25,440		$ 0.3750	$ 9,540,002
	2011	Total	335,119	2011 Avg Rate	$ 0.3750	$ 125,669,492
64	2012	January	24,110		$ 0.3750	$ 9,041,185
65	2012	February	22,321		$ 0.3750	$ 8,370,276
66	2012	March	23,331		$ 0.3750	$ 8,749,187
67	2012	April	24,436		$ 0.3750	$ 9,163,566
68	2012	May	28,983		$ 0.3750	$ 10,868,487
69	2012	June	32,266		$ 0.3750	$ 12,099,704
70	2012	July	33,908		$ 0.3750	$ 12,715,307
71	2012	August	35,442		$ 0.3750	$ 13,290,575
72	2012	September	29,560		$ 0.3750	$ 11,085,053
73	2012	October	25,517		$ 0.3750	$ 9,568,832
74	2012	November	21,763		$ 0.3750	$ 8,161,125
75	2012	December	25,419		$ 0.3750	$ 9,532,181
	2012	Total	327,055	2012 Avg Rate	$ 0.3750	$ 122,645,476
76	2013	January	793		$ 0.3750	$ 297,346
77	2013	February	-		$ 0.3750	$ -
78	2013	March	-		$ 0.3750	$ -
79	2013	April	-		$ 0.3750	$ -
80	2013	May	-		$ 0.3750	$ -
81	2013	June	-		$ 0.3750	$ -
82	2013	July	(207)		$ 0.3750	$ (77,471)
	2013	Total	586	2013 Avg Rate	$ 0.3750	$ 219,875
		Totals	2,039,367	Avg Rate	$ 0.2475	$ 504,676,457

* Denotes change in Nodal Surcharge Rate.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 3: Summary by Cost Category

Line	Cost Category	*Reference*	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor		$ 81,975,687	$ 6,052,042	$ -	$ 88,027,729	16.2%
2	External Resource		274,045,044	11,239,194	-	285,284,238	52.4%
3	Administrative & Employee Expenses		2,067,983	39,365	-	2,107,348	0.4%
4	Software & Software Maintenance		36,236,408	4,043,928	-	40,280,336	7.4%
5	Hardware & Hardware Maintenance		49,295,959	2,455,902	-	51,751,861	9.5%
6	Subtotal - Direct Costs		443,621,081	23,830,431	-	467,451,512	85.9%
7	Backfill		6,336,183	-	-	6,336,183	1.2%
8	Indirect Support Allocation		15,664,674	-	-	15,664,674	2.9%
9	Facilities Allocation		7,317,152	-	-	7,317,152	1.3%
10	Interest Expense		36,496,635	8,330,527	2,813,060	47,640,222	8.8%
11	Subtotal - Indirect Costs		65,814,644	8,330,527	2,813,060	76,958,231	14.1%
12							
13	Total - Nodal Program Costs	*S4*	**$ 509,435,725**	**$ 32,160,958**	**$ 2,813,060**	**$ 544,409,743**	**100.0%**

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 4: Summary of Costs by Nodal Asset

Line	Nodal Asset	*Reference*	Cost of Nodal Implementation	Cost after Nodal Stabilization Period	Cost incurred after Stabilization Period	Total	% Total
1	Market Management System (MMS)	*S5*	$ 121,474,666	$ 433,341	$ -	$ 121,908,007	22.4%
2	Energy Management System (EMS)	*S6*	61,588,843	419,983	-	62,008,826	11.4%
3	External Web Services (EWS)	*S7*	52,113,946	169,731	-	52,283,677	9.6%
4	Market Information System (MIS)	*S8*	33,893,928	255,749	-	34,149,677	6.3%
5	Settlement and Billing (S&B)	*S9*	28,461,257	230,377	-	28,691,634	5.3%
6	Network Model Management System (NMMS)	*S10*	27,085,686	290,615	-	27,376,301	5.0%
7	Enterprise Data Warehouse (EDW) / Enterprise Information Services (EIS)	*S11*	27,011,860	141,437	-	27,153,297	5.0%
8	Congestion Revenue Rights (CRR)	*S12*	18,799,051	78,931	-	18,877,982	3.5%
9	Current-Day Reports (CDR)	*S13*	15,370,502	29,174	-	15,399,676	2.8%
10	Commercial Systems Integration (CSI)	*S14*	11,189,894	29,794	-	11,219,688	2.1%
11	Credit Management Module (CMM)	*S15*	8,090,397	235,813	-	8,326,210	1.5%
12	Registration (REG)	*S16*	5,534,599	160,264	-	5,694,863	1.0%
13	Market Participant Identity Management (MPIM)	*S17*	5,114,643	10,189	-	5,124,832	0.9%
14	Outage Scheduler (OS)	*S18*	2,891,480	384,374	-	3,275,854	0.6%
15	ERCOT Visibility (Openview) / Business Service Management (BSM)	*S19*	2,743,705	356,877	-	3,100,582	0.6%
16	Planning Model On Demand (MOD)	*S20*	1,455,606	5,478	-	1,461,084	0.3%
17	ERCOT.com Website Enhancements	*S21*	112,198	-	-	112,198	0.0%
18	Program Operating Expense	*S22*	86,503,464	28,928,831	2,813,060	118,245,355	21.7%
19	Total - Nodal Program Costs		**$ 509,435,725**	**$ 32,160,958**	**$ 2,813,060**	**$ 544,409,743**	**100.0%**

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 5: Market Management System (MMS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 15,544,948	$ 352,183	$ -	$ 15,897,131	13.0%
2	External Resource	82,020,516	67,831	-	82,088,347	67.3%
3	Administrative & Employee Expenses	121,845	-	-	121,845	0.1%
4	Software & Software Maintenance	5,324,327	-	-	5,324,327	4.4%
5	Hardware & Hardware Maintenance	7,125,763	2,266	-	7,128,029	5.8%
6	Subtotal - Direct Costs	110,137,399	422,280	-	110,559,679	90.7%
7	Backfill	19,641	-	-	19,641	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	11,317,626	11,061	-	11,328,687	9.3%
11	Subtotal - Indirect Costs	11,337,267	11,061	-	11,348,328	9.3%
12						
13	Total - Asset Costs	**$ 121,474,666**	**$ 433,341**	**$ -**	**$ 121,908,007**	**100.0%**

Market Management System (MMS), a real-time mission critical system, consists of a set of market clearing engines and a relational database housing the set of market rules as defined in the ERCOT protocols to be used in operating and managing the ERCOT markets – Day Ahead Market, Ancillary Services, Reliability Unit Commitment, Congestion Revenue Rights, and the Real-Time Security Constrained Economic Dispatch/Locational Marginal Price Calculator.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 6: Energy Management System (EMS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 9,265,244	$ 262,266	$ -	$ 9,527,510	15.4%
2	External Resource	39,881,883	143,855	-	40,025,738	64.5%
3	Administrative & Employee Expenses	119,023	-	-	119,023	0.2%
4	Software & Software Maintenance	3,189,245	-	-	3,189,245	5.1%
5	Hardware & Hardware Maintenance	4,996,283	2,770	-	4,999,053	8.1%
6	Subtotal - Direct Costs	57,451,678	408,891	-	57,860,569	93.3%
7	Backfill	30,609	-	-	30,609	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	4,106,556	11,092	-	4,117,648	6.6%
11	Subtotal - Indirect Costs	4,137,165	11,092	-	4,148,257	6.7%
12						
13	Total - Asset Costs	**$ 61,588,843**	**$ 419,983**	**$ -**	**$ 62,008,826**	**100.0%**

Energy Management Systems (EMS) is a mission critical system designed to operate the power grid in real-time – the functionality includes communicating to the market through Inter-Control Center Communications Protocol (ICCP)/ Remote Terminal Unit (RTU), Supervisory Control and Data Acquisition, Load Forecast, Renewable Power Production forecast, Frequency Control, and a suite of Network Applications containing the State Estimator, Contingency Analysis, real time stability analysis tool, as well as power flow and stability tools used in study applications such as outage coordination studies.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 7: External Web Services (EWS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 6,923,122	$ 161,406	$ -	$ 7,084,528	13.6%
2	External Resource	33,623,462	-	-	33,623,462	64.3%
3	Administrative & Employee Expenses	51,103	-	-	51,103	0.1%
4	Software & Software Maintenance	2,046,557	-	-	2,046,557	3.9%
5	Hardware & Hardware Maintenance	4,905,773	2,672	-	4,908,445	9.4%
6	Subtotal - Direct Costs	47,550,017	164,078	-	47,714,095	91.3%
7	Backfill	7,828	-	-	7,828	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	4,556,101	5,653	-	4,561,754	8.7%
11	Subtotal - Indirect Costs	4,563,929	5,653	-	4,569,582	8.7%
12						
13	Total - Asset Costs	**$ 52,113,946**	**$ 169,731**	**$ -**	**$ 52,283,677**	**100.0%**

External Web Services (EWS) provides machine to machine Application Programming Interface (APIs) to external Market Participants and the Market Information System (MIS) Portal.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 8: Market Information System (MIS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 4,819,708	$ 228,075	$ -	$ 5,047,783	14.8%
2	External Resource	19,340,965	18,289	-	19,359,254	56.7%
3	Administrative & Employee Expenses	115,641	-	-	115,641	0.3%
4	Software & Software Maintenance	1,943,113	-	-	1,943,113	5.7%
5	Hardware & Hardware Maintenance	4,744,643	3,228	-	4,747,871	13.9%
6	Subtotal - Direct Costs	30,964,070	249,592	-	31,213,662	91.4%
7	Backfill	4,482	-	-	4,482	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	318	-	-	318	0.0%
10	Interest Expense	2,925,058	6,157	-	2,931,215	8.6%
11	Subtotal - Indirect Costs	2,929,858	6,157	-	2,936,015	8.6%
12						
13	Total - Asset Costs	**$ 33,893,928**	**$ 255,749**	**$ -**	**$ 34,149,677**	**100.0%**

The Market Information System (MIS) Portal is the primary Nodal Market Participant interface providing both Graphical User Interface (GUI) and web service interfaces. The MIS is the means by which Market Participants access reports generated by Current-Day Reports (CDR) or Enterprise Data Warehouse (EDW).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 9: Settlements & Billing (S&B)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 8,279,279	$ 186,275	$ -	$ 8,465,554	29.5%
2	External Resource	13,597,360	38,635	-	13,635,995	47.5%
3	Administrative & Employee Expenses	24,842	-	-	24,842	0.1%
4	Software & Software Maintenance	1,889,607	-	-	1,889,607	6.6%
5	Hardware & Hardware Maintenance	2,114,758	1,462	-	2,116,220	7.4%
6	Subtotal - Direct Costs	25,905,846	226,372	-	26,132,218	91.1%
7	Backfill	177,978	-	-	177,978	0.6%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	2,377,433	4,005	-	2,381,438	8.3%
11	Subtotal - Indirect Costs	2,555,411	4,005	-	2,559,416	8.9%
12						
13	Total - Asset Costs	**$ 28,461,257**	**$ 230,377**	**$ -**	**$ 28,691,634**	**100.0%**

The main function of the Settlements & Billing (S&B) component is to generate the settlement statements and invoices as prescribed by the protocols for both the Day Ahead Market (DAM) and Real-Time Market (RTM).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 10: Network Model Management System (NMMS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 5,546,409	$ 69,664	$ -	$ 5,616,073	20.5%
2	External Resource	15,783,515	215,458	-	15,998,973	58.4%
3	Administrative & Employee Expenses	36,091	-	-	36,091	0.1%
4	Software & Software Maintenance	2,609,914	-	-	2,609,914	9.5%
5	Hardware & Hardware Maintenance	1,980,457	1,145	-	1,981,602	7.2%
6	Subtotal - Direct Costs	25,956,386	286,267	-	26,242,653	95.9%
7	Backfill	4,465	-	-	4,465	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	1,124,835	4,348	-	1,129,183	4.1%
11	Subtotal - Indirect Costs	1,129,300	4,348	-	1,133,648	4.1%
12						
13	Total - Asset Costs	**$ 27,085,686**	**$ 290,615**	**$ -**	**$ 27,376,301**	**100.0%**

The purpose of the Network Model Management System (NMMS) is to: (a) provide capabilities to input, edit network model data and validate the data for use in numerous applications; and (b) create network model cases to be used for annual planning, Congestion Revenue Rights auctions, Dynamic Simulation and Network Operations models; deploying these network cases to the production system so the model data can be used in the respective applications when the corresponding equipment is operational in the field.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 11: Enterprise Data Warehouse (EDW) / Enterprise Information Services (EIS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 5,979,132	$ 123,718	$ -	$ 6,102,850	22.5%
2	External Resource	8,964,741	11,279	-	8,976,020	33.1%
3	Administrative & Employee Expenses	67,749	-	-	67,749	0.2%
4	Software & Software Maintenance	2,977,226	-	-	2,977,226	11.0%
5	Hardware & Hardware Maintenance	7,619,696	3,791	-	7,623,487	28.1%
6	Subtotal - Direct Costs	25,608,544	138,788	-	25,747,332	94.8%
7	Backfill	3,831	-	-	3,831	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	1,399,485	2,649	-	1,402,134	5.2%
11	Subtotal - Indirect Costs	1,403,316	2,649	-	1,405,965	5.2%
12						
13	Total - Asset Costs	**$ 27,011,860**	**$ 141,437**	**$ -**	**$ 27,153,297**	**100.0%**

The Enterprise Data Warehouse (EDW) / Enterprise Information Services (EIS) is the repository of all the archived data and provides extracts/reports for Market Participants, compliance reporting as well as market monitoring and market analysis.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 12: Congestion Revenue Rights (CRR)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 3,063,355	$ 36,447	$ -	$ 3,099,802	16.4%
2	External Resource	9,143,635	39,665	-	9,183,300	48.6%
3	Administrative & Employee Expenses	32,817	-	-	32,817	0.2%
4	Software & Software Maintenance	1,908,059	-	-	1,908,059	10.1%
5	Hardware & Hardware Maintenance	3,016,120	1,555	-	3,017,675	16.0%
6	Subtotal - Direct Costs	17,163,986	77,667	-	17,241,653	91.3%
7	Backfill	24,224	-	-	24,224	0.1%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	1,610,841	1,264	-	1,612,105	8.5%
11	Subtotal - Indirect Costs	1,635,065	1,264	-	1,636,329	8.7%
12						
13	Total - Asset Costs	**$ 18,799,051**	**$ 78,931**	**$ -**	**$ 18,877,982**	**100.0%**

The Congestion Revenue Rights (CRR) component is necessary to auction the available network capacity of the ERCOT Transmission System that is not allocated to Non Opt-In Entities (NOIEs), Wind Generation Resources (WGR) or sold in previous auctions, and to facilitate bilateral trading on the Market Information System (MIS).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 13: Current-Day Reports (CDR)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 2,185,682	$ 28,683	$ -	$ 2,214,365	14.4%
2	External Resource	8,770,903	-	-	8,770,903	57.0%
3	Administrative & Employee Expenses	52,442	-	-	52,442	0.3%
4	Software & Software Maintenance	881,179	-	-	881,179	5.7%
5	Hardware & Hardware Maintenance	2,151,640	368	-	2,152,008	14.0%
6	Subtotal - Direct Costs	14,041,846	29,051	-	14,070,897	91.4%
7	Backfill	2,032	-	-	2,032	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	144	-	-	144	0.0%
10	Interest Expense	1,326,480	123	-	1,326,603	8.6%
11	Subtotal - Indirect Costs	1,328,656	123	-	1,328,779	8.6%
12						
13	Total - Asset Costs	**$ 15,370,502**	**$ 29,174**	**$ -**	**$ 15,399,676**	**100.0%**

The Current-Day Reports (CDR) system provides access to reports, policies, guidelines, procedures, forms and applications, as required by the Nodal protocols. Reports delivered by CDR include data with a latency of less than eight hours, and will be either in the form of predefined, scheduled reports or reports that are generated on demand and as data end points to External Web Services (EWS).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 14: Commercial Systems Integration (CSI)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 3,255,101	$ 28,690	$ -	$ 3,283,791	29.3%
2	External Resource	5,345,970	-	-	5,345,970	47.6%
3	Administrative & Employee Expenses	9,767	-	-	9,767	0.1%
4	Software & Software Maintenance	742,922	-	-	742,922	6.6%
5	Hardware & Hardware Maintenance	831,443	189	-	831,632	7.4%
6	Subtotal - Direct Costs	10,185,203	28,879	-	10,214,082	91.0%
7	Backfill	69,974	-	-	69,974	0.6%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	934,717	915	-	935,632	8.3%
11	Subtotal - Indirect Costs	1,004,691	915	-	1,005,606	9.0%
12						
13	Total - Asset Costs	**$ 11,189,894**	**$ 29,794**	**$ -**	**$ 11,219,688**	**100.0%**

Commercial Systems Integration (CSI) integrates upstream operational systems with downstream billing and financial and risk management systems (collectively known as commercial systems).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 15: Credit Management Module (CMM)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 2,152,093	$ 186,250	$ -	$ 2,338,343	28.1%
2	External Resource	3,476,573	41,209	-	3,517,782	42.2%
3	Administrative & Employee Expenses	10,179	-	-	10,179	0.1%
4	Software & Software Maintenance	689,013	-	-	689,013	8.3%
5	Hardware & Hardware Maintenance	1,120,355	583	-	1,120,938	13.5%
6	Subtotal - Direct Costs	7,448,213	228,042	-	7,676,255	92.2%
7	Backfill	42,593	-	-	42,593	0.5%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	599,591	7,771	-	607,362	7.3%
11	Subtotal - Indirect Costs	642,184	7,771	-	649,955	7.8%
12						
13	Total - Asset Costs	**$ 8,090,397**	**$ 235,813**	**$ -**	**$ 8,326,210**	**100.0%**

The purpose of the Credit Monitoring and Management (CMM) application is to provide a software tool for the ERCOT credit staff to ensure financial credit risks to the Market Participants are monitored and mitigated, if needed. Essentially, the CMM application serves two high level purposes, to: (a) determine the credit exposure of the participants in the ERCOT markets; and (b) ascertain whether Market Participants meet credit standards and acquire necessary collateral instruments from them, if needed.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 16: Registration (REG)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 1,083,374	$ 152,008	$ -	$ 1,235,382	21.7%
2	External Resource	1,627,841	3,896	-	1,631,737	28.7%
3	Administrative & Employee Expenses	12,763	-	-	12,763	0.2%
4	Software & Software Maintenance	764,695	-	-	764,695	13.4%
5	Hardware & Hardware Maintenance	1,769,253	875	-	1,770,128	31.1%
6	Subtotal - Direct Costs	5,257,926	156,779	-	5,414,705	95.1%
7	Backfill	13,691	-	-	13,691	0.2%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	262,982	3,485	-	266,467	4.7%
11	Subtotal - Indirect Costs	276,673	3,485	-	280,158	4.9%
12						
13	Total - Asset Costs	**$ 5,534,599**	**$ 160,264**	**$ -**	**$ 5,694,863**	**100.0%**

The Registrations system (REG) is where Market Participant entity relationships are defined and propagated to the rest of the ERCOT systems.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 17: Market Participant Identity Management (MPIM)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 924,467	$ 9,257	$ -	$ 933,724	18.2%
2	External Resource	2,284,737	-	-	2,284,737	44.6%
3	Administrative & Employee Expenses	8,986	-	-	8,986	0.2%
4	Software & Software Maintenance	456,374	-	-	456,374	8.9%
5	Hardware & Hardware Maintenance	1,158,809	583	-	1,159,392	22.6%
6	Subtotal - Direct Costs	4,833,373	9,840	-	4,843,213	94.5%
7	Backfill	505	-	-	505	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	280,765	349	-	281,114	5.5%
11	Subtotal - Indirect Costs	281,270	349	-	281,619	5.5%
12						
13	Total - Asset Costs	**$ 5,114,643**	**$ 10,189**	**$ -**	**$ 5,124,832**	**100.0%**

Market Participant Identity Management (MPIM) is a single application that manages Market Participant access to ERCOT systems.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 18: Outage Scheduler (OS)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 936,417	$ 160,455	$ -	$ 1,096,872	33.5%
2	External Resource	1,484,809	210,795	-	1,695,604	51.8%
3	Administrative & Employee Expenses	2,247	-	-	2,247	0.1%
4	Software & Software Maintenance	75,267	-	-	75,267	2.3%
5	Hardware & Hardware Maintenance	171,766	2,010	-	173,776	5.3%
6	Subtotal - Direct Costs	2,670,506	373,260	-	3,043,766	92.9%
7	Backfill	473	-	-	473	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	220,501	11,114	-	231,615	7.1%
11	Subtotal - Indirect Costs	220,974	11,114	-	232,088	7.1%
12						
13	Total - Asset Costs	**$ 2,891,480**	**$ 384,374**	**$ -**	**$ 3,275,854**	**100.0%**

The Outage Scheduler (OS) supports the ability to submit transmission equipment and generation resource outage requests and to manage those requests throughout their life cycles. The Outage Scheduler makes outage data available to other ERCOT systems and provides the capability for managing outage life cycles including enforcing outage scheduling rules.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 19: ERCOT Visibility (Openview) / Business Service Management (BSM)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 468,679	$ 45,814	$ -	$ 514,493	16.6%
2	External Resource	913,924	309,575	-	1,223,499	39.5%
3	Administrative & Employee Expenses	5,260	-	-	5,260	0.2%
4	Software & Software Maintenance	1,127,606	-	-	1,127,606	36.4%
5	Hardware & Hardware Maintenance	(17,538)	-	-	(17,538)	-0.6%
6	Subtotal - Direct Costs	2,497,931	355,389	-	2,853,320	92.0%
7	Backfill	184	-	-	184	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	245,590	1,488	-	247,078	8.0%
11	Subtotal - Indirect Costs	245,774	1,488	-	247,262	8.0%
12						
13	Total - Asset Costs	**$ 2,743,705**	**$ 356,877**	**$ -**	**$ 3,100,582**	**100.0%**

ERCOT Visibility (Openview)/ Business Service Management (BSM) provides the framework in which ERCOT can bring the various, deployed departmental monitoring tools into one event stream to provide a holistic view of systems at ERCOT. BSM allows the management of IT infrastructure components in an ordered, standardized manner, defining rules, actions and alerting characteristics on faults or potential issues in the environment. It is primarily used for monitoring servers, devices, networks, databases and applications to ensure faults are detected and alerted upon in a timely manner.

The sales tax refund, from obtaining 501(c)(4) status in 2009, was allocated across the Nodal Assets. For the ERCOT Visibility (Openview) asset, this credit allocation exceeds the expenses for hardware leaving a credit total balance in that cost category. The hardware actual expense is $0.00 with the sales tax credit being ($17,538.44).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 20: Planning Model On Demand (MOD)

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 298,068	$ 5,203	$ -	$ 303,271	20.8%
2	External Resource	848,218	-	-	848,218	58.1%
3	Administrative & Employee Expenses	1,940	-	-	1,940	0.1%
4	Software & Software Maintenance	140,259	-	-	140,259	9.6%
5	Hardware & Hardware Maintenance	106,431	22	-	106,453	7.3%
6	Subtotal - Direct Costs	1,394,916	5,225	-	1,400,141	95.8%
7	Backfill	240	-	-	240	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	60,450	253	-	60,703	4.2%
11	Subtotal - Indirect Costs	60,690	253	-	60,943	4.2%
12						
13	Total - Asset Costs	**$ 1,455,606**	**$ 5,478**	**$ -**	**$ 1,461,084**	**100.0%**

Planning Model On Demand (MOD) is a temporal based model staging tool used to build time-targeted branch models for use in steady-state power flow cases. MOD is an integral part of the consolidation of network modeling databases used by ERCOT.

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 21: ERCOT.com Website Enhancements

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 30,535	$ -	$ -	$ 30,535	27.2%
2	External Resource	65,216	-	-	65,216	58.1%
3	Administrative & Employee Expenses	39	-	-	39	0.0%
4	Software & Software Maintenance	(194)	-	-	(194)	-0.2%
5	Hardware & Hardware Maintenance	(1,574)	-	-	(1,574)	-1.4%
6	Subtotal - Direct Costs	94,022	-	-	94,022	83.8%
7	Backfill	22	-	-	22	0.0%
8	Indirect Support Allocation	-	-	-	-	0.0%
9	Facilities Allocation	-	-	-	-	0.0%
10	Interest Expense	18,154	-	-	18,154	16.2%
11	Subtotal - Indirect Costs	18,176	-	-	18,176	16.2%
12						
13	Total - Asset Costs	**$ 112,198**	**$ -**	**$ -**	**$ 112,198**	**100.0%**

The sales tax refund, from obtaining 501(c)(4) status in 2009, was allocated across the Nodal Assets. For the ERCOT.com asset, this credit allocation exceeds the expenses for software and hardware leaving a credit total balance in those cost categories. The software actual expense is $296.95 with the sales tax credit being ($491.22). The hardware actual expense is $0.00 with the sales tax credit being ($1,573.87).

Electric Reliability Council of Texas, Inc. (ERCOT)
Nodal Program Costs and Resources
Schedule 22: Program Operating Expense

Line	Cost Category	Cost of Nodal Implementation	Cost during Nodal Stabilization Period	Cost after Nodal Stabilization Period	Total	% Total
1	Internal Labor	$ 11,220,074	$ 4,015,648	$ -	$ 15,235,722	12.9%
2	External Resource	26,870,776	10,138,707	-	37,009,483	31.3%
3	Administrative & Employee Expenses	1,395,249	39,365	-	1,434,614	1.2%
4	Software & Software Maintenance	9,471,239	4,043,928	-	13,515,167	11.4%
5	Hardware & Hardware Maintenance	5,501,881	2,432,383	-	7,934,264	6.7%
6	Subtotal - Direct Costs	54,459,219	20,670,031	-	75,129,250	63.5%
7	Backfill	5,933,411	-	-	5,933,411	5.0%
8	Indirect Support Allocation	15,664,674	-	-	15,664,674	13.2%
9	Facilities Allocation	7,316,690	-	-	7,316,690	6.2%
10	Interest Expense	3,129,470	8,258,800	2,813,060	14,201,330	12.0%
11	Subtotal - Indirect Costs	32,044,245	8,258,800	2,813,060	43,116,105	36.5%
12						
13	Total - Asset Costs	**$ 86,503,464**	**$ 28,928,831**	**$ 2,813,060**	**$ 118,245,355**	**100.0%**

Exhibit C

DOCKET NO. 42122

ERCOT'S ACCOUNTING OF THE AMOUNT AND TIMING OF THE COLLECTION OF THE NODAL SURCHARGE	**§**	**PUBLIC UTILITY COMMISSION OF TEXAS**

NOTICE

On December 30, 2013, Electric Reliability Council of Texas, Inc. (ERCOT) filed with the Public Utility Commission of Texas (Commission), *ERCOT's Accounting of the Amount and Timing of the Collection of the Nodal Surcharge*, pursuant to Commission Orders in Docket Nos. 32686,[1] 36851,[2] 38840,[3] 39865,[4] and 40524.[5] ERCOT's filing includes detailed schedules identifying its expenditures on the Texas Nodal Market Implementation Program (TNMIP or Nodal Program), and an accounting of the repayment of nodal program expenses and debt service to date. The filing is the second and final accounting of two nodal program accounting filings as required by Commission orders.

As part of the Commission's approval of the nodal surcharge, it required the following filings after the completion of the Nodal Program:

> ERCOT shall file with the Commission within 12 months after the Nodal market "goes live" and again within 12 months after ERCOT stops collecting the nodal

[1] Docket No. 32686, *Application of the Electric Reliability Council of Texas for Approval of a Nodal Market Implementation Surcharge and Request for Interim Relief*, Order (May 23, 2007), and Order Nunc Pro Tunc (Jun. 13, 2007).

[2] Docket No. 36851, *Application of the Electric Reliability Council of Texas for Approval of a Revised Nodal Market Implementation Surcharge*, Order (Oct. 14, 2009).

[3] Docket No. 38840, *Application of ERCOT For Approval of Post-Go-Live Utilization of the Texas Nodal Market Implementation Surcharge*, Order (Dec. 20, 2010).

[4] Docket No. 39865, *Petition of Electric Reliability Council of Texas, Inc. For Approval of Revision To The Final Order in Docket No. 32686*, Order (Dec. 19, 2011).

[5] Docket No. 40524, *Electric Reliability Council of Texas Accounting of the Costs and Revenues of Implementing the Nodal Market*, Order (Sept. 6, 2012).

> surcharge an accounting of the costs and revenues of implementing the Nodal market.[6]

ERCOT filed its first accounting, *Accounting of the Costs and Revenues of Implementing the Nodal Market*, with the Commission on July 2, 2012.[7]

In addition to approving ERCOT's accounting of the costs and revenues of implementing the nodal market in its Order in Docket No. 40524, the Commission specified that the second (and final) accounting by ERCOT shall be filed as follows:

> ERCOT shall file with the Commission an accounting of the amount and timing of the collection of the nodal surcharge within twelve (12) months after ERCOT stops collecting the nodal surcharge.[8]

In this proceeding, ERCOT requests that the Commission affirm that it has complied with the filing requirements established in its prior orders.

Pursuant to P.U.C. Proc. R. §22.252 (f), persons who wish to intervene in or comment in this proceeding should notify the Commission within 30 days of this notice. A request to intervene or for further information should be mailed to the Public Utility Commission of Texas, P.O. Box 13326, Austin, Texas 78711-3326. A request to intervene shall include a statement of position containing a concise statement of the requestor's position on the petition, a concise statement of each question of fact, law, or policy that the requestor considers at issue and a concise statement of the requestor's position on each issue identified.

ERCOT has posted this Notice and a copy of its Petition on its website at: http://www.ercot.com/about/governance/legal_notices.

Interested parties may also access ERCOT's Application through the Commission's web site at: http://www.puc.texas.gov/industry/filings/Default.aspx under Docket No. 42122.

Date of this Notice: December 30, 2013.

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6 Docket No. 32686, Order Nunc Pro Tunc at 2 (Ordering Para. 1c) (Jun. 13, 2007).
7 Docket No. 40524, ERCOT Application (Jul. 2, 2012).
8 Docket No. 40524, Order at 5 (Ordering Para. 2) (Sept. 6, 2012).