DIRECT TESTIMONY OF

RONALD J. HINSLEY

VICE-PRESIDENT AND CHIEF INFORMATION OFFICER

ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

IN SUPPORT OF
ERCOT'S APPLICATION FOR APPROVAL
OF A REVISED NODAL MARKET
IMPLEMENTATION SURCHARGE

DIRECT TESTIMONY OF RONALD J. HINSLEY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ronald ("Ron") J. Hinsley. My business address is 2705 West Lake Drive, Taylor, Texas 76574.

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

A. I am employed by the Electric Reliability Council of Texas, Inc. ("ERCOT") as Vice-President and Chief Information Officer ("CIO"). I joined ERCOT in my present position in April 2005.

Q. PLEASE OUTLINE YOUR EDUCATION AND PROFESSIONAL QUALIFICATIONS.

A. I have a Bachelor of Arts degree in communications and management information systems from the College of Saint Mary in Omaha, Nebraska. Prior to joining ERCOT, I held various Information Technology leadership positions for Aquila, Inc., an international retailer and wholesaler of electric and natural gas energy, over fourteen years with that company. My positions included Chief Information Officer with United Energy, an Aquila holding in Melbourne, Australia, and Vice-President of Information Technology with the firm's U.S. entity.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS CHIEF INFORMATION OFFICER.

A. I am responsible for both the operations and strategic direction of ERCOT's Information Technology ("IT") Division. My key responsibilities include ensuring that ERCOT has the people, processes, technology and budget in place for its computer systems to function to the standards required by the Nodal Protocols.

Q. WHAT IS YOUR ROLE IN THE TEXAS NODAL MARKET IMPLEMENTATION PROGRAM?

A. I am the ERCOT executive officer responsible for delivering the Nodal market systems, including the hardware and software capabilities necessary for the completion of the Texas Nodal Market Implementation Program ("TNMIP" or "Nodal Program"). The day-to-day activities of the Nodal Program are managed by the program leadership team, headed up by Nodal Program Executive Director, Mr. Jerry Sullivan.

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

A. Yes, I have. I testified on behalf of ERCOT in Docket No. 31824 (ERCOT's 2006 System Administration Fee case) and in Docket No. 32686 (ERCOT's request for approval of the Nodal surcharge).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide an overview of the progress of the Nodal Program to date, and to update the Commission on the results of internal and external audits of the Nodal Program that have occurred since the Commission last addressed Nodal surcharge issues. The increases in the Nodal Program budget that cause ERCOT to request an upward revision to the Nodal surcharge are addressed in the testimony of Mr. Sullivan.

Q. DOES YOUR TESTIMONY PROVIDE SUPPORT FOR THE SPECIFIC SURCHARGE AMOUNT PROPOSED BY ERCOT?

A. No. The calculation of the specific surcharge amount requested by ERCOT is detailed in the testimony of ERCOT's Vice-President and Chief Financial Officer ("CFO"), Mr. Steve Byone.

Q. PLEASE PROVIDE AN OVERVIEW OF THE STATUS OF IMPLEMENTATION OF THE NODAL MARKET.

A. ERCOT reports regularly to the Commission, the ERCOT Board of Directors, and other stakeholders on the status of Nodal market implementation. ERCOT summarizes Nodal Program status by characterizing it as "Red," "Amber," or "Green." As of the filing of this testimony, Nodal Program status overall is "Amber."

Q. PLEASE DESCRIBE THE CRITERIA USED TO MEASURE NODAL PROGRAM STATUS.

A. ERCOT measures the Nodal Program's progress based on its consistency with a set of interdependent metrics: Project Scope, Quality, Schedule, and Cost. To be successful the Nodal Program must be in alignment on all these metrics. The Red, Amber, and Green rubrics reflect specific criteria identified in Table 1.

Table 1: Nodal Program Metrics

	Scope	Quality	Schedule	Cost
Red	Program is not aligned to Nodal Protocols	Product quality is not sufficient for Nodal launch	Go-Live expected more than 30 days after target	$263M + 10%
Amber	Program is aligned to previous Nodal Protocol version	Most Nodal products achieve quality standards	Go-Live expected within 30 days of target	Less than $263M + 10%
Green	Program is aligned with current Nodal Protocols	All Nodal products achieve quality standards	Go-Live expected on target	$263M

The current overall Amber status is based on the following:

- **Scope status is Green**: Project scope is now fully aligned with the February 2008 Nodal Protocols, as well as the November 2007 Nodal Operating Guide and other detailed program documents related to implementation of the Nodal Protocols as they have been revised during the course of the Nodal Program. ERCOT is working with the Transition Plan Task Force ("TPTF") to ensure the Program maintains alignment with the Nodal Protocols.

- **Quality status is Amber:** Many of the most complex Nodal software products are now undergoing testing. Testing status is being managed using Quality Center (the tool used within ERCOT for this purpose), and testing results are being tracked closely to make certain that defects are resolved. Oversight for all testing is provided by a "Testing Tsar," who reports on the

status of testing and defects at every TPTF meeting. Until testing is complete, ERCOT is hesitant to represent that Quality can be declared Green (*i.e.*, that all products are of sufficient quality for Go-Live). Thus far, as detailed below, ERCOT is pleased with the quality of the products being developed for the Nodal market.

- **Schedule status is Amber:** ERCOT views the Nodal Program as being on track to hit its Go-Live target date of December 2008, but certain threats to timely completion remain. The primary challenges involve the Market Management System ("MMS") delivery schedule, infrastructure limitations, and issues related to software systems integration. ERCOT's ability to meet each of these challenges is directly related to the increased budget underlying ERCOT's request for a revised Nodal surcharge.

- **Cost status is Red:** ERCOT forecasts its cost to complete the Nodal transition to be more than 10% above the $263 million budget estimate upon which the Nodal surcharge was based in Docket No. 32686. The Commission's Orders in that docket provide that ERCOT should seek approval of a revised surcharge if Nodal Program costs exceed the 10% threshold.

ERCOT characterizes overall program status as Amber. ERCOT is optimistic that the uncertainties associated with Schedule and Quality issues will be resolved, but cannot guarantee the success of software testing and resulting integration until those tasks are closer to completion. Nodal Program leadership is working diligently to keep Scope changes to an absolute minimum for the remainder of the Nodal transition project. Resolving the Cost issues depends on the completion of this case and ERCOT's ability to implement a revised Nodal surcharge on a timely basis. Approval of the revised Nodal surcharge will permit ERCOT to change Cost status to Green and move forward to meet the other challenges to successful completion of the Nodal transition.

Q. HOW WILL THE APPROVAL OF THE REVISED NODAL SURCHARGE AFFECT OVERALL NODAL PROGRAM STATUS?

A. The revised Nodal surcharge will permit ERCOT to recover sufficient funds to pay current expected program costs and provide a contingency amount that would cover unexpected shortfalls as the Nodal Program nears completion. This permits

ERCOT to complete the numerous tasks ahead with reasonable assurance that it is not incurring costs that it does not have a way to recover. ERCOT will continue its efforts to run the Nodal Program as efficiently as possible given schedule and scope constraints, but it is essential for ERCOT's planning purposes that it is able to work with a budget and funding source that realistically reflects the enormity and complexity of this project.

Q. ARE THE NODAL PROGRAM'S EXPENDITURES SUBJECT TO MANAGEMENT CONTROLS WITHIN ERCOT?

A. Yes. The Nodal Program leadership team developed specific program controls applicable to the Nodal Program. In addition, the program must also comply with ERCOT's general corporate financial controls. Nodal leadership developed the Program Management Office Control System ("PMOCS") as the central program-specific system for managing costs and expenditures. Because the Nodal Program is a self-contained, time-sensitive, and complex project, it was critical from a project management perspective for it to have its own financial control systems and procedures. Nodal costs are, however, accounted for and reported by the ERCOT Finance Department, and the overall program controller is a member of the Finance team. This accounting and reporting mechanism was designed to ensure objectivity and independence from the Nodal Program.

Q. HAVE THE NODAL PROGRAM'S OPERATIONS BEEN SUBJECT TO OUTSIDE REVIEW AND OVERSIGHT?

A. Yes. The Nodal Program has been subject to frequent and rigorous review at several levels. In 2005, ERCOT retained IBM Global Business Services to conduct ongoing audits of Nodal Program management controls. IBM Global Business Services is an independent operating unit of the company and is separate from the hardware side of IBM. (This separation is important to ERCOT as our hardware purchase decisions must also be carefully scrutinized throughout the Program.) IBM measures ERCOT's cost control system, the PMOCS, against "Best Practices Core Standards" used to evaluate cost and program control

systems in numerous industries. ERCOT retained IBM to deliver eight (8) audit reports during the life of the Nodal Program.

Q. WHAT IS THE PURPOSE OF THE IBM AUDITS?

A. The purpose is twofold. First, IBM's expertise in program management "best practices" assists the Nodal Program in identifying areas where cost controls, operating procedures, or communications could be improved. Second, the regularity of the audits assists management in identifying areas where the Nodal Program has improved and where persistent problems require additional attention. These audits are important to ERCOT because the organization has never before undertaken a multi-faceted project with a scope and schedule like the Nodal Program. Outside review and advice concerning best practices on a project this critical has been important to ERCOT's efficient delivery of Nodal market systems.

Q. PLEASE SUMMARIZE THE RESULTS OF THE IBM AUDITS RECEIVED TO DATE.

A. IBM has completed five audit reports to date. The first was delivered October 23, 2006; the most recent (Report No. 5) was delivered on February 12, 2008. The first audit report concluded that "minor improvements" were needed in the Nodal Program's PMOCS cost control system, but concluded that "most principles of control and PMOCS design as defined would meet best practices Core Standards."[1] In the second and third audit reports, IBM identified more areas of suggested improvement, rating PMOCS as needing "moderate improvements." IBM made eight recommendations to improve the PMOCS.[2] ERCOT has made the IBM recommendations subject to its well-established process for tracking the satisfactory completion of audit recommendations, and the Nodal Program's

[1] IBM Initial Assessment of Texas Nodal Program Controls (Report No. 1) Addendum to Initial Assessment Report, Cover Letter, p. 1 (October 23, 2006).

[2] IBM Nodal Program Controls System – Progress Review Report No. 2 (January 18, 2007); IBM's Progress Review of Texas Nodal Program Controls (Report No. 3) (May 11, 2007).

responses to audit reports have been consistently subject to ERCOT's overall standards and practices.

When the Nodal Program received the fourth audit report, in September 2007, IBM upgraded its findings – from "moderate improvements needed" back to "minor improvements needed." The fourth report "evaluated the Project Management Office, Energy Management System, Market Management System, and Integration Readiness and Transition Projects. IBM focused on the changes to the structure and performance of the PMOCS."[3] The report concluded that "controls in place are generally functioning as expected," and urged ERCOT to continue its implementation of previous IBM recommendations to "reduce risk of schedule delays and cost overruns."[4]

The fifth and most recent IBM report recommended "moderate improvement," but observed that the "incremental cost" of implementing these changes may not be worthwhile given the advanced stage of the Nodal Program's development. The report, issued February 12, 2008, also noted that ERCOT has developed many sources of external program review that supplement the PMOCS tools that IBM reviewed:

> Other external review processes provide supplemental oversight to enhance the control procedures in use. The engagement of the Transition Plan Task Force (TPTF) in reviews of requirements and design documentation, as well as progress oversight by the TPTF and ERCOT executive teams, requires production of review materials. These oversight groups raise questions which can provide a level of assurance on work progress and issues identification and resolution. Tools and techniques have been developed and evolved by the Nodal PMO to support these external review processes. Coordination of activities across teams occurs through frequent discussions of team members and team leaders. At various points in time, the PMO has deployed resources to support review activities perceived to be important at a particular point in time. Recently, the Delivery Assurance Group (DAG) was established to manage the readiness for release of software to the various testing stages. A Testing Tsar has

[3] IBM's Progress Review of Texas Nodal Program Controls (Report No. 4), Cover Letter, p. 1 (September 10, 2007).
[4] *Id.*

been added to bring consistency to the testing processes and ensure adherence to phase entry/exit criteria.[5]

Q. WHAT HAS NODAL PROGRAM LEADERSHIP LEARNED FROM THE IBM AUDITS ABOUT NODAL PROGRAM PERFORMANCE?

A. The IBM audits have demonstrated that the PMOCS are in alignment with best practices for projects of similar size and complexity. The program's systems are not perfect, and IBM has identified ways in which both their structure and performance can be improved. In many areas, the Nodal Program has implemented those recommendations, and in others it continues those implementation efforts. Moreover, as the February 2008 IBM report points out, the Nodal Program has created program review structures as needed to meet needs that have arisen as the program has evolved. On the whole, IBM's audits reflect that Nodal Program design and performance are advancing the goals of meeting the Go-Live schedule and controlling costs.

Q. HAVE THE PROGRAM'S COST CONTROL PROCEDURES BEEN SUBJECT TO ADDITIONAL REVIEW?

A. Yes. A group of ERCOT's internal auditors which reports directly to the Finance and Audit Committee of the ERCOT Board of Directors and is independent of ERCOT staff influence conducts periodic audits focused on the Nodal Program. ERCOT's internal auditors have completed or will complete audits of Nodal Program: (1) procurement and contract administration; (2) consultant and vendor expenses; (3) consultant and vendor compliance with procurement, purchasing, and billing standards; (4) recruiting and hiring processes; (5) ethical compliance by ERCOT employees and outside contractors; (6) accounts payable; and (7) the Nodal overhead allocations methodology. In addition, internal auditors have reviewed, at the request of ERCOT management, specific purchases of Nodal Program computer hardware infrastructure and specific consultant expense

[5] IBM's Progress Review of Texas Nodal Program Controls (Report No. 5), Cover Letter, p. 2 (February 12, 2008).

reimbursements within the Nodal program to ensure they complied with corporate standards.

Q. PLEASE SUMMARIZE THE RESULTS OF THE INTERNAL AUDIT REVIEWS OF THE NODAL PROGRAM.

A. Several of the reviews gave the Nodal Program's efforts a "Controlled" rating - the audit equivalent of the "Green" program status described above. In other areas, internal auditors suggested "minor" or "moderate" improvements in program procedures or operations. None of the reports recommended major changes to Nodal Program controls or reported systemic problems. The internal audit reports are summarized in Table 2 below.

Table 2: Internal Audit Results

Topic	Date	Report Rating
Purchasing of Nodal Infrastructure (Management Request)	12/21/07	Minor Improvements Needed
Accounting Methodology – Allocation of Overhead Costs	10/22/07	Moderate Improvements Needed
Vendor Billings	10/19/07	Controlled
Signing Authority and Delegation of Authority	08/06/07	Minor Improvements Needed
Compliance with Procurement Guidelines	08/03/07	Minor Improvements Needed
Employee Time Tracking and Direct Internal Labor Expense Calculations	07/16/07	Moderate Improvements Needed
Recruiting Review	03/30/07	Controlled
Ethics Compliance Review	03/30/07	Controlled
Recruiting Review	03/30/07	Controlled
Contractor and Employee Expenses (Management Request)	11/02/06	Controlled

Q. WHAT HAS NODAL PROGRAM LEADERSHIP LEARNED FROM THE INTERNAL AUDITS CONDUCTED TO DATE?

A. Nodal Program leadership appreciates that ERCOT's internal audit team has devoted significant resources to ensuring the Nodal Program's compliance with

ERCOT financial guidelines and with good business practices generally. On the whole, the audits have demonstrated that program controls are sound, comply with ERCOT's corporate standards, and are functioning as intended.

The audits did identify situations where, typically, isolated incidents were indeed contrary to established controls. We have taken note of those incidents and strive to ensure they are not repeated. Notably, the areas where the audits concluded "moderate improvements" were needed involved internal accounting processes within ERCOT. Getting these processes right is extremely important, and following the audit, recommended improvements have been implemented. We are gratified, however, that issues regarding the program's interface with external participants in the Nodal Program – vendor billings, contractor expenses, and ethics compliance – are considered under control.

Q. PLEASE SUMMARIZE THE CHANGES IN THE NODAL PROGRAM THAT HAVE CAUSED ERCOT TO REVISE ITS ESTIMATED COST AT COMPLETION.

A. The changes resulting in increased Nodal Program costs can be grouped in four general categories:

- Risk-mitigation efforts, rework due to midstream adjustments, and unforeseen events;
- Post-procurement changes to vendor statements of work;
- Scope changes associated with NPRRs and associated software development; and
- Costs associated with schedule delays.

The impacts of these cost issues are addressed in detail in the testimony of Mr. Sullivan.

Q. DOES ERCOT'S REVISED NODAL PROGRAM BUDGET INCLUDE A NEW CONTINGENCY AMOUNT?

A. Yes. The contingency portion of ERCOT's previous budget was small relative to the size of the Nodal Program at that stage of the software development life cycle

it was in when the contingency was established. Before considering a request to revise the Nodal surcharge, the Nodal Program dedicated the approved contingency funds to reduce budget shortfalls wherever possible. Nodal Program leadership believes that a refreshed contingency is important to our ability to manage unforeseen budget issues as the program moves to completion. The $15 million requested contingency amount should provide the Nodal Program the flexibility it needs to confront unexpected events as the Nodal transition nears completion.

Q. DO YOU BELIEVE THE NEW BUDGET APPROVED BY THE ERCOT BOARD OF DIRECTORS IS A REASONABLE ESTIMATE OF THE COST TO COMPLETE THE NODAL PROGRAM?

A. Yes, for three reasons. First, the completion of Baseline 1 and 2 planning – combined with a small likelihood of additional Scope changes – makes it much less likely the Nodal Program will experience the type of unexpected cost increases that have occurred over the last year. The key determinant within ERCOT's and Market Participants' control of whether those costs increase is the minimization of additional changes in program scope. Second, the increased costs related to infrastructure, internal allocations, and the contingency amount relate to items that ERCOT does not expect to be subject to changes before the program is complete. Third, the software products being created for the Nodal Program are much further into their development and testing life cycle than they were when the Commission originally approved the Nodal surcharge.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY AT THIS TIME?

A. Yes.