DIRECT TESTIMONY OF

MIKE CLEARY

SENIOR VICE PRESIDENT AND CHIEF TECHNOLOGY 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 MIKE CLEARY

I. INTRODUCTION AND BACKGROUND

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Mike Cleary. 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 the Electric Reliability Council of Texas, Inc. ("ERCOT") as Senior Vice-President and Chief Technology Officer ("CTO") with specific responsibility for delivering the Texas Nodal Market Implementation Program ("Nodal Program" or "Texas Nodal"). I began serving as ERCOT CTO on March 16th, 2009.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS CHIEF TECHNOLOGY OFFICER.

A. I am responsible for planning, directing and coordinating the implementation of the program to expand the wholesale electricity market in the ERCOT region from a Zonal to a Nodal based power market. I am accountable for ensuring feasibility and efficiency in all aspects of operations related to implementation of the Nodal Protocols. As the overall leader of the Nodal Program, I have a dual

reporting relationship: I report both to the ERCOT Chief Executive Officer ("CEO") and to the ERCOT Board of Directors.

Q. PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS.

A. I have over 28 years of industry experience in global electricity and traded commodity markets, deregulation and exchanges, and have established a track record of successfully planning and implementing cost-effective solutions for new and existing market opportunities. I have undertaken a wide variety of roles, from strategic to operational, including project and program management, strategy and business plan formulation, and the design and implementation of business processes and information systems, often in complex environments that are undergoing rapid change. In my engagements, I have delivered multi-million dollar programs on time and on budget that drive market growth, increase profitability and enhance a company's competitive advantage.

I am a native of Ireland, living in Houston Texas, with a professional qualification in accounting, obtained from the Association of Chartered Certified Accountants in 1994. I spent fifteen (15) years at the Electricity Supply Board ("ESB"), the national electric utility in Ireland, where I served in many roles in the generation, transmission, distribution and information systems and audit divisions of the organization. I spent a number of years working with PJM Interconnection and Accenture after coming to the U.S. in 1998. I managed the Information Systems

Division at PJM Interconnection. In that role, I was responsible for implementing and maintaining the information technology infrastructure and applications that support the wholesale energy markets and electricity reliability for most of the Northeastern United States. While a consultant with Accenture working at PJM, I was the overall program advisor for the PJM market expansion program. In this role, I advised the PJM's program director and senior management on the scope, budget and implementation of the market expansion program, and had a broad-based management mandate spanning all projects. I was also responsible for overseeing the day-to-day activities of the Accenture consulting team, which involved management of market simulation activities, process and procedure definition, system specification maintenance and change management, selection and ongoing management of the system's contractors, system testing (at vendor site, on-site, and certification), preparation and delivery of training, assistance with participant readiness coordination, planning and coordination of market trials, planning and coordination of the transition to live market operations, operational support, and provision of general management assistance to the client.

I worked for Utilicast on the Nodal Program review process in the final months of 2008 and early 2009, and I left Utilicast in March 2009 to accept my current position with ERCOT. As a consultant, I have advised and assisted clients to deploy trading and risk management business services including commodity trading (electricity, gas and coal), trade settlement, counterparty checkout and I.T. performance monitoring. I performed consulting work in Texas for CenterPoint

that focused on advising the company regarding business opportunities created by deployment of intelligent grid technology. My other consulting engagements have included work for GridSouth (settlements and billing systems integration), Grid Florida (business capability and application blueprint for RTO), Constellation Commodities Group (energy trade and risk management systems development and integration), Powerex (I.T. strategy), Anadarko (gas trading and risk management) and ESB International (implementation of energy efficiency initiatives in Russia).

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

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide support for ERCOT's request for approval of the Nodal Program schedule and budget, and of the revised Nodal surcharge that will fund the completion of the Nodal Program.

Q. PRIOR TO JOINING ERCOT AS CTO, WERE YOU INVOLVED IN ERCOT'S TRANSITION TO A NODAL MARKET?

A. In September 2009, the Special Nodal Program Committee, a sub-committee of the ERCOT Board of Directors, engaged my previous employer, Utilicast, to perform periodic, independent reviews of the Nodal Program. The scope of these

reviews covered the Nodal Program's work plans, budget adequacy, progress in achieving milestones, and other performance issues. The purpose of the reviews is to provide the ERCOT Board of Directors' Special Nodal Program Committee and the ERCOT Board with independent assessments of the Nodal Program and its progress. Utilicast is also assisting management by providing periodic reports on selected topics and making monthly in-person presentations on issues and risks identified during Utilicast's program reviews.

Q. WHAT WAS YOUR ROLE IN THE UTILICAST REVIEWS OF THE NODAL PROGRAM?

A. I was the leader of the Utilicast team, and was ultimately responsible for the preparation and presentation of Utilicast's reports to the ERCOT Board and the Special Nodal Steering Committee. Beginning October 2008, I devoted one hundred percent (100%) of my working hours to working with ERCOT on Nodal Program issues.

Q. WHAT PROMPTED YOUR DECISION TO MOVE FROM UTILICAST TO LEADERSHIP OF THE NODAL PROGRAM?

A. I understand the historical performance of this program (and the zonal program) and the reputational risk inflicted on me by accepting the role and responsibility to deliver it on time and on budget, however, I believe in wholesale power markets and that the Commission,, Market Participants, and the ERCOT Board of Directors are trying to do the right thing implementing a Nodal based electricity

market. There are challenges and there are risks but I believe ERCOT has the right budget, plan, and leadership to get this program operational. I have experience delivering large, complex, and high stakes projects in the utility industry that faced challenges similar to the Nodal Program. Many of the issues and risks facing ERCOT in this situation are familiar to me from previous engagements with other utilities or Independent System Operators ("ISOs"). As I was working on Nodal issues for Utilicast, ERCOT determined it would retain a strong Nodal Program director (what has been called a "field marshal" or "czar") to manage the Nodal Program through to its completion. ERCOT's plan, which was formulated with input from ERCOT's Board and the Commission, was to require the new Nodal director to have direct accountability to the ERCOT Board of Directors as well as to ERCOT's CEO, and to invest the position with the authority to act quickly and decisively to keep the Nodal Program on track to Go-Live by December 31, 2010. Based on my experience with the Nodal Program, I agreed that this was a sound approach to fostering Nodal leadership and accountability. I have been impressed with the Public Utility Commissioners, the Market Participant Representatives, and the ERCOT Board of Directors, and believed I could offer the ERCOT stakeholders the skills they were seeking. I was gratified to be chosen for this position in March 2009, and look forward to the challenges ahead.

Q. ARE YOU CONFIDENT IN THE ORGANIZATION AND PERSONNEL NOW RESPONSIBLE FOR DELIVERING TEXAS NODAL?

A. I have worked with ERCOT to carefully review the Nodal Program structure and to make changes needed to improve its performance. In addition, the Nodal Program has recruited new personnel who have experience delivering multi-million dollar programs and in managing complex and dynamic project schedules. I have included as Exhibit MC-1 to my testimony a description of the new Nodal Program organizational structure, as well as information on key personnel changes occurring in the program. Finding and keeping the right people to complete Texas Nodal will be an ongoing challenge, but I am committed to having aboard only those individuals who are totally committed to quality, efficiency, and accountability.

II. ERCOT'S PROPOSED PLANS FOR COMPLETING TEXAS NODAL

Q. HAVE YOU REVIEWED THE PROPOSED SCHEDULE AND BUDGET FOR COMPLETING THE NODAL PROGRAM THAT ERCOT REQUESTS THE COMMISSION APPROVE IN THIS PROCEEDING?

A. Yes. I reviewed schedule and budget documentation in my work with Utilicast, and I will delve even more deeply into the details in my new role with ERCOT. The documentation regarding the development and details of the proposed schedule and budget are presented as part of the testimony of ERCOT's Senior Vice-President and Chief Operating Officer Mr. Trip Doggett, who was the ERCOT executive responsible for Nodal delivery in the months before I joined ERCOT in March 2009.

Q. DOES THE PROPOSED SCHEDULE AND BUDGET REFLECT A REASONABLE, ACHIEVABLE PLAN FOR COMPLETING TEXAS NODAL?

A. Yes. Based on the known effort required for completion and the known program risks and assumptions, I believe the revised schedule and budget represent a reasonable plan for completing the Nodal Program. This is not a guarantee. There are inherent risks to the Nodal Program, such as a possible difference between the functionality developed in applications compared to the Nodal Protocols and Market Participant expectations. Also, as the Utilicast team discussed in our program audit reports Nos. 8 and 9, there certainly are areas where the schedule and budget should be challenged to ensure that neither time nor money is wasted as the Nodal transition moves to completion. The overarching project plan, however, is well-conceived and puts ERCOT in a position to deliver the Nodal market by the revised Go-Live date of December 31, 2010 and within the bounds of the budget approved by the ERCOT Board of Directors. As I discuss, there are critical risks to the program's success, but those risks are being actively addressed within the context of the proposed schedule and budget ERCOT presents to the Commission in this proceeding.

Q. IS YOUR VIEW CONSISTENT WITH UTILICAST'S FINDINGS IN ITS REPORT NO. 8 REGARDING SHORTCOMINGS IN THE ORIGINAL NODAL PROGRAM PLAN?

A. Yes, because ERCOT has made substantial changes in the Nodal Program to correct the deficiencies identified in program design and management. For example, the Nodal Program developed an integrated program schedule ("IPS"), which greatly improves the program's visibility into potential problems before they escalate into crises. The IPS also provides the "roadmap" that identifies critical path and near critical path tasks that must be completed to keep the overall Nodal Program running on schedule. Similarly, the Nodal Program has taken steps to institute more useful program controls than were in place earlier in the program. The Nodal Program Office ("PMO") was restructured, and implemented project controls consistent with the complexity and scale of the Nodal Program. In addition, a Nodal Program Controller's Office was established and has implemented cost tracking and variance reporting procedures that improve the transparency of Texas Nodal's financial reporting. The PMO and Controller's Office has worked together to create key controls, including status reporting, schedule management, and cost tracking procedures. In addition to increased transparency, the new controls enable more thorough risk and issue management. There is still important work to be done to ensure that Nodal Program finances are managed effectively at all levels, but significant progress has been made.

Q. UTILICAST REPORT NO. 8 CONCLUDED THAT ERCOT'S BUDGET PROPOSAL WAS A REASONABLE "NOT TO EXCEED" ESTIMATE.

WHY SHOULD THE COMMISSION APPROVE A BUDGET ON A "NOT TO EXCEED" BASIS?

A. It is my belief that the Nodal Program must operate in a disciplined, effective and efficient manner and eliminate unnecessary costs. At the same time, however, a large program like Texas Nodal that still faces significant risks must also operate with realistic budget projections in place, and should have sufficient flexibility to enable it to respond appropriately to mission-critical challenges. Based on my analysis of the Nodal Program, I have consistently recommended that the Board of Directors not attempt to "scrub" the budget on a line item basis, and I recommend the same to the Commission. The budget is built upon a reasonable factual foundation, and it is now subject to stringent controls that ensure over-budget activities will not be covered from discretionary (also called "contingency") funds without specific approval by the ERCOT CTO, CEO, and Board of Directors. Moreover, the financial controls and increased transparency they have brought to the Nodal Program will facilitate an open and consistent management review process – a process that will highlight where Texas Nodal's performance can be made more efficient and effective as the program progresses.

Q. WHAT ARE THE CONTROLS ON THE USE OF THE DISCRETIONARY FUNDS TO WHICH YOU ARE REFERRING?

A. At its March 2009 meeting, the ERCOT Board of Directors adopted a formal policy strictly limiting the use of discretionary (also called "contingency") funds

in the Nodal Program budget. The policy adopted by the Board included the following provisions:

- The Board shall retain complete authority to oversee the authorization, disbursement, and accounting of Discretionary Funds.

- To the extent that the overall Nodal Program "estimate to complete" is less than the budget, the Board shall control the extent to which such underspend shall be reallocated to the Discretionary Funds category such that the funds may not be spent without further, specific Board approval.

- Any ERCOT Staff request for permission to commit Discretionary Funds shall comply with this process. Any such request will contain:

  - Due diligence on the need for the increased spend. This should include consideration of areas such as:

    - Justification for the budget increase;
    - Whether the change is necessary or whether it can be deferred to a later release;
    - Assessment of different solution options considered; and
    - The criteria used in the solution selection.

  - Explanation as to why this increase in spend has occurred including:

    - Materialization of a known risk and why risk mitigation failed;
    - Nodal Protocol Revision Request ("NPRR") change control request; and
    - Whether there have been any issues with project management.

  - Requirements definition for program changes and estimated cost.

  - Assumptions and risks relating to proposed program changes.

  - Work schedule and resource plan relating to the proposed changes.

  - Impact assessment to overall integrated program schedule ("IPS").

- Lessons learned and any corrective actions to improve budget planning, controls and management.

- Before any discretionary funds are authorized to be spent, the request must be approved by:

  - The CTO;
  - The CEO;
  - The Board of Directors, including such committee recommendations or actions as the Board shall request.

This policy limiting the availability of discretionary funds, in tandem with strong controls and management of project budgets, will ensure that spending is effectively controlled as the Nodal Program moves to Go-Live.

Q. IS THE NODAL PROGRAM IMPLEMENTING ANY ADDITIONAL BUDGET CONTROL MEASURES?

A. Yes. I have attached to my testimony as Exhibit MC-3 the "Budget Management Process" that is being implemented by the Nodal Program. The new process is designed to control spending, to ensure that ERCOT receives value for money spent, to improve financial reporting, and to formally incorporate the Board's policy on use of discretionary funds.

Q. WILL ERCOT'S FINANCE PERSONNEL HAVE INCREASED INVOLVEMENT IN NODAL PROGRAM BUDGET MATTERS?

A. Yes. On a going forward basis, the office of the Chief Financial Officer will oversee the development of accurate and clear Nodal Program budget reporting to the ERCOT Board of Directors on a monthly basis. Mr. Mike Petterson,

ERCOT's Controller, will assume responsibility for the newly established Nodal Financial Management Office. The Project Managers within the Nodal Program will continue to be responsible for managing project financials, including actual spend, variance analysis, estimates to complete ("EACs"), and establishing and maintaining the task-level linkage between their respective approved project schedules and their approved budgets. The Nodal Financial Management Office will be responsible for the standards, policies, controls and consolidated reporting of the budget information on a monthly and quarterly basis. We expect that these steps will improve the quality of Nodal Program financial information and support stronger fiscal responsibility and stewardship of the Nodal Program.

III. MANAGING NODAL PROGRAM RISKS

Q. WHAT STEPS IS THE NODAL PROGRAM TAKING UNDER YOUR LEADERSHIP TO ENSURE ITS SUCCESSFUL COMPLETION?

A. I only recently assumed my duties at ERCOT, so there may be initiatives we undertake to meet challenges in the future that I cannot identify with specificity at this time. I have, however, been working closely with Nodal Program staff and the Board's Nodal Program Committee in recent months to address key risks to the success of the Nodal Program. All of these initiatives are responsive to Nodal Program risks identified in Utilicast's program audits and/or by the work of the Nodal PMO or the Board's Nodal Program Committee. As of the date this

testimony is filed there are five major initiatives to address key risks that are already on the "front burner."

Q. PLEASE IDENTIFY THE FIVE INITIATIVES AND THE NODAL PROGRAM RISKS THEY ADDRESS.

A. The initiatives underway include the following:

- Improvements in the integration phase of the Nodal Program.
- Managing vendor contracts and procurement issues.
- "Locking down" Nodal Program scope and resources.
- Market Participant readiness.
- Data Center space concerns.

Q. WHAT CHALLENGES ARE BEING ADDRESSED IN THE INTEGRATION PHASE OF THE NODAL PROGRAM?

A. When the Utilicast team conducted its initial review of the Nodal Program, we identified the integration phase of the Nodal Program as a critical risk area. Utilicast devoted a separate Nodal Program report entirely to the challenges facing the integration effort. Rather than repeat all those findings here, I have attached Utilicast Report No. 9 to my testimony as Exhibit MC-1. Even before Utilicast issued Report No. 9, however, I was working with Nodal Program staff to formulate solutions to the challenges facing the integration effort.

Q. WHAT STEPS HAS THE NODAL PROGRAM TAKEN TO RESOLVE INTEGRATION ISSUES?

A. Texas Nodal created the "Nodal Enterprise Verification Project" as a team that will address the various aspects of systems integration in a coherent manner. Ms. Linda Clarke has been designated as the leader of the Nodal Enterprise Verification Project, and the Nodal Program is finalizing the organizational structure that will guide the integration efforts forward.

Q. DOES MS. CLARKE HAVE RELEVANT EXPERIENCE IN THIS AREA?

A. Yes. Ms. Clarke has been working in the electric industry for over twenty (20) years, focusing on energy market design initiatives and assisting in the development of market and system operations services. Her experience, particularly her work with other ISOs, is directly relevant to the Texas Nodal integration effort. Ms. Clarke was the Director of Market Integration for the Midwest ISO, where she was the business requirements group lead on the Midwest Market Initiative ("MMI") project and provided oversight and direction to Midwest ISO staff, as well as outside vendors for business requirement and implementation aspects of the MMI project. She has also served as Manager of Market Development at PJM Interconnection, where she assisted with the development and implementation of LMP, FTR auction, and the multi-settlement markets. Ms. Clarke also worked at California ISO, where she was responsible for leading the business practice manual development team and supporting

external readiness activities, and at New York ISO, where she developed the software requirements for their credit management system.

Q. IS THE NEW NODAL ENTERPRISE VERIFICATION TEAM TAKING ACTION TO ADDRESS THE PROGRAM RISKS IDENTIFIED BY UTILICAST?

A. Yes, work is either completed or in progress to address all the audit points identified in Utilicast Report No. 9. Ms. Clarke has taken the lead in recruiting other experienced experts for leadership roles for the key components of the Enterprise Verification effort: interface testing, end-to-end testing, market trials, and system cutover. The team has developed (and communicated to project managers) a new approach to interface testing, which makes project teams accountable for developing and testing their application interfaces. Similarly, the Enterprise Verification team is developing and communicating clearly defined plans (including scope, objectives, and deliverables) for end-to-end testing and the core system integration components. Work is also underway to configure a dedicated integration testing ("iTest") environment that will include the technical architecture and platform software necessary to make it successful.

Q. WHAT IS THE NODAL PROGRAM DOING TO MANAGE VENDOR CONTRACTS AND PROCUREMENT?

A. The contracts ERCOT has with the major vendors involved in Texas Nodal have been the subject of much discussion among ERCOT staff, stakeholders, and

Board members. The Nodal Program staff is investigating whether ERCOT's position in these contracts can be strengthened on a going forward basis. Once the Nodal market opens, ERCOT and the major vendors will still have to maintain business relationships that could be mutually beneficial. That long-term aspect of the relationship may not have been sufficiently recognized in earlier contracts, and that is an issue we hope to explore in formal re-negotiation meetings, beginning with ERCOT's five (5) major Nodal Program vendors.

Q. HOW WILL THIS RE-NEGOTIATION PROCESS WORK?

A. ERCOT has retained EquaTerra, a firm that specializes in improving efficiency and effectiveness in complex commercial settings, particularly involving Information Technology ("I.T.") issues. As of the filing of this testimony, ERCOT has retained EquaTerra, and they have begun to review key contracts and make recommendations for future negotiations. Our first negotiation sessions with vendors will be in early April, and our objective is to work with EquaTerra to complete the re-negotiation process with the top five Nodal vendors by June 30, 2009. I have had significant experience in negotiations such as these, and understand the importance of long-term accountability and trust in ERCOT's relationships with its vendors. I expect to be personally involved in the entire re-negotiation process.

Q. WHAT IS BEING DONE TO "LOCK DOWN" NODAL SCOPE AND RESOURCES?

A. ERCOT made significant progress on this front. In 2008, ERCOT management took steps to reduce the number of NPRRs in an effort to control scope creep. In early 2009, ERCOT formalized a strict change control process. As detailed in Mr. Doggett's testimony, the ERCOT Board adopted Protocol Revision Request ("PRR") 799, which empowers the ERCOT CEO to enforce "scope discipline" that will enable Texas Nodal to complete its mission without concerns about constant scope changes. Now that PRR 799 is in effect, any change that affects the Nodal Program schedule or budget must be approved by ERCOT's CEO and the Board of Directors.

There is a second source of concern, however, related to protecting the human resources needed by the Nodal Program from being drawn away to work on Zonal market issues. Utilicast recommended in Report No. 9 that "no enhancements should be considered for Zonal market applications or processes unless assessed as business critical." ERCOT followed up on this recommendation by directing the Nodal PMO to carefully monitor Zonal work with an eye toward preventing Zonal projects from utilizing resources devoted to the Nodal transition. The PMO has examined this issue and, as of this writing, there are no known Zonal projects that would constrain Nodal resources in calendar year 2009. The Nodal PMO will continue to actively monitor this issue, and the non-Nodal ERCOT project staff is aware of its importance.

Q. WHAT ARE THE RISK FACTORS RELATED TO MARKET PARTICIPANT READINESS?

A. In the Nodal context, "readiness" for Go-Live includes operational readiness (making certain the systems are robust and fully tested), ERCOT readiness (making certain the ISO "home team" can use the systems for grid and market operations), and Market Participant readiness. Market Participant readiness is ultimately (and I suppose, obviously) up to the Market Participants rather than to ERCOT. If the market is not ready, however, no amount of good work by ERCOT will assure timely Nodal Go-Live. Market Participant issues have posed tremendous challenges to market cutover plans of other ISOs, most notably delays associated with California ISO's Market Redesign and Technology Upgrade ("MRTU").

Q. WHAT IS ERCOT DOING TO ADDRESS THE RISKS ASSOCIATED WITH MARKET PARTICIPANT READINESS?

A. First and foremost, Nodal Program staff work closely with Market Participants to ensure that education, training, and troubleshooting are available to deal with readiness issues. My experience so far is that Market Participants in the ERCOT region understand their role in making the Nodal market work and will do what is necessary to help it succeed. The issue is of such importance, however, that Nodal Program leadership is working with the Board's Nodal Program Committee to select new leadership for Market Participant readiness effort – in particular, leaders who have the breadth of experience working in the ERCOT market to

ensure that readiness activities work not as a matter of theory, but will work in practice in the Texas market.

Q. PLEASE EXPLAIN THE PROGRAM RISK ASSOCIATED WITH THE DATA TRANSMISSION ISSUES BETWEEN ERCOT AND MARKET PARTICIPANTS.

A. This issue (which is being tracked as a Nodal Program Risk) is an example of how ERCOT and Market Participants must work together on a very detailed level to ensure the success of Nodal market operations. If the volume and content of the information transmitted over Nodal external web services is not defined in detail, then Market Participant applications may attempt to transmit information in forms and of sizes that ERCOT's Nodal applications are unable to process. Once this issue was identified, Nodal Program staff developed draft specifications for data transfers over Nodal external web services. The draft specifications were shared with Market Participants, who are currently reviewing them before further discussion with Nodal Program staff. In addition, Nodal staff has contacted entities who have dealt with similar issues (*e.g.*, PJM Interconnection, PSI, and Structure) to seek their recommendations for a solution. The solution for this issue thus remains in the planning stages, but its execution will be closely monitored by the Nodal Program staff and the Board's Nodal Program Committee.

Q. WHAT ARE THE "DATA CENTER SPACE CONCERNS" THAT POSE A RISK TO THE NODAL SCHEDULE AND BUDGET?

A. The Nodal market will generate enormous amounts of data that machines at ERCOT must process and store. While ERCOT's I.T. personnel have done a remarkable job of utilizing data center facilities, there is an ERCOT-wide concern that both the space and power capabilities of the existing ERCOT data centers may be inadequate to handle the post-Go-Live demands.

Q. WHAT STEPS IS ERCOT TAKING TO ENSURE ADEQUATE DATA CENTER SPACE AND POWER?

A. ERCOT personnel are working on three fronts to address this issue. First, I.T. personnel are conducting a study to validate current assumptions about the data capacity that will be required for Nodal market operations. The results of this study will inform ERCOT's decisions about when to execute additional migrations needed to accommodate Nodal needs until the data centers are complete. Second, ERCOT is developing an Information Lifecycle Management plan aimed at developing methods for most efficiently managing data produced by ERCOT. Once implemented, the Information Lifecycle Management project should help ERCOT mitigate the impact of the increased data storage that will come with Nodal Go-Live. Finally, ERCOT is expanding its data center facilities. ERCOT has begin the process of building the new facilities, and will transition Nodal operations to the new facilities in 2011.

Q. WHO IS MANAGING THE DATA CENTER ISSUES?

A. Nancy Capezzuti, ERCOT Vice-President and Chief Administrative Officer, is the accountable ERCOT staff person for delivery of the new data center space expansion, new buildings and power supply. David Forfia, Director, I.T. Infrastructure, is responsible for delivering the necessary equipment, systems, and data requirements plans. The issue has the attention of the ERCOT Board of Directors and senior management as well; at its March 2009 meeting, the Board of Directors requested a monthly status report on the data center upgrade issues. I expect to work closely with ERCOT's I.T. staff to ensure that Nodal Go-Live is not impacted by data center infrastructure issues.

Q. IF THE ISSUES YOU HAVE OUTLINED ARE RESOLVED SATISFACTORILY, WILL THAT RESOLVE ALL NODAL PROGRAM RISKS?

A. Definitely not. In my role as a Utilicast consultant to the ERCOT Board of Directors, I often emphasized the complexity and difficulty of the task facing the Nodal Program. As I frequently told the Board members, even if ERCOT manages its "known" risks perfectly, in a project the scale of Texas Nodal there may be "unknown unknowns" that could create problems as the project progresses to Go-Live. I believe that the Nodal Program staff has made significant progress over the last several months in identifying risks (some of which were previously "unknowns") and running them to ground. In addition, the Nodal Program has a much more effective tool set in place for reporting,

tracking, and establishing accountability for problems as they arise. All that said, there is still a tremendous amount of work ahead, and no one can guarantee that new risks will not arise. The important thing in a project like this one is not to eliminate risk; the important thing is to know how to identify the risks honestly and manage them effectively. That is what I hope to do as leader of the Texas Nodal Program.

IV. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.