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Missouri Public Service Commission

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December 22, 1998

GORDON L. PERSINGER Acting Executive Director

WESS A. HENDERSON **Director, Utility Operations**

ROBERT SCHALLENBERG Director, Utility Services

DONNA M. KOLILIS Director, Administration

DALE HARDY ROBERTS Secretary/Chief Regulatory Law Judge

DANA K. JOYCE

DEC 2 2 1998

Secretary/Chief Regulatory Law Judge Missouri Public Service Commission P. O. Box 360 Jefferson City, MO 65102

Missouri Public Service Commission

RE: OO-99-43 - In Re the Matter of an Investigation into Public Utility Preparedness for Year 2000 Conversion

Dear Mr. Roberts:

Mr. Dale Hardy Roberts

Enclosed for filing in the above-captioned case are an original and fourteen (14) copies of a MOTION TO FILE.

This filing is made in compliance with the Commission's November 20, 1998 order to hold technical conference.

In compliance with the Commission's September 15, 1998 Notice Regarding Pleading Requirements, copies of this Report are not being mailed to all of the parties to this case.

Thank you for your attention to this matter.

Sincerely yours,

LERAL SHEHWELL

Assistant General Counsel

(573) 751-6651

(573) 751-9285 (Fax)

Enclosure

cc: Counsel of Record



BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Missouri Public Service Commission

In the Matter of an Investigation)	
Into Public Utility Preparedness)	a N- 00 99 42
for Year 2000 Conversion.)	Case No. OO-99-43

MOTION TO FILE

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and hereby submits for filing in the above docket the following materials from the Technical Conference held on December 16, 1998 pursuant to Commission order dated November 20, 1998.

Agenda for Technical Conference

Prepared Written Materials Submitted by Conference Presenters

Summary of Participant Evaluation Forms

WHEREFORE, Staff requests the Commission accept the above referenced materials for filing within this docket.

Respectfully submitted,

DANA K. JOYCE General Counsel

Lera L. Shemwell

Assistant General Counsel

Missouri Bar No. 43792

R. Blair Hosford

Deputy General Counsel

Missouri Bar No. 21775

Attorneys for the Staff of the Missouri Public Service Commission P.O. Box 360 Jefferson City, MO 65102

573/751-7431

CERTIFICATE OF SERVICE

In accord with the Commission's September 15, 1998 Notice Regarding Pleading Requirements, copies of this filing are not being mailed to all Parties to the case. A copy is being submitted to the Office of the Public Counsel.

Les I - Shemwell

MISSOURI PUBLIC SERVICE COMMISSION Y2K FORUM **DECEMBER 16, 1998** CAPITOL PLAZA HOTEL

FILED

DEC 2 2 1998

AGENDA

MORNING SESSION:

11:20-11:45

11:45-1:00

Securities And Tax Issues

Lunch On Your Own

Missouri Public Service Commission

8:30-9:00	Registration - Coffee and Rolls
9:00-9:30	Welcome: Gordon Persinger, Executive Director, Missouri Public Service Commission
	 Missouri And The Year 2000: Dennis Roedemeier, Director, Business Development Group, Department Of Economic Development Michael M. Benzen, Chief Information Officer, Office Of Information Technology And Chair, Governor's Council On The Year 2000
9:30-10:15	 Y2K: Where Do We Go From Here? Dave Wirick, Associate Director For Administration And Special Projects, National Regulatory Research Institute
10:15-10:30	 AmerenUE - Callaway Nuclear Power Plant Terry Baxter, Network And System Administrator, AmerenUE Michael McCrady, AmerenUE Winston Freund, AmerenUE
10:30-10:45	Telecommunications Dave Evans, State Manager, Regulatory Affairs, GTE
10:45-11:00	Break
11:00-11:10	 PSC Preparedness Willis Doss, Manager, PSC Information Services Group
11:10-11:20	Banking Development

Earl Manning, Commissioner Of Finance, Department Of Economic Development

Pat Baumhoer, Partner, Andereck, Evans, Milne, Peace And Baumhoer

AFTERNOON SESSION:

1:00-2:15

Contingency Planning

• Terry Baxter, Michael McCrady, Winston Freund **Emergency Preparedness: SEMA**

 Robb Pilkington, State Emergency Management Agency

DNR (Department of Natural Resources) - Water

• Jerry Lane, Kent Peetz, Darrell Osterhoudt, Tim Campbell

2:15-2:30

Break

2:30-3:45

Contingency Planning

• Terry Baxter, Michael McCrady, Winston Freund Billing

Dave Evans

Due Diligence

• Lera Shemwell

Public Relations

Brenda Putman, CPA
 City Utilities Of Springfield

3:45

Wrap-Up

 Dave Wirick, Associate Director For Administration And Special Projects, National Regulatory Research Institute

Y2K: Where Do We Go From Here?

The Missouri Public Service
Commission Y2K
Roundtable
December 16, 1998
by Dave Wirick, NRRI

The views and opinions expressed herein do not necessarily reflect the views of the NRRI, the NARUC, or NARUC-member commissions.

MAR

My Purpose Today...

- All we're debating is the definition of "bad."
- "We have only one person to blame and that's each other."
- A modest proposal for a collaborative approach on the Harvard model.

|--|--|--|--|--|--|--|

General Application of the Mediation Model

- Identification of Problem Behaviors, Issues, Interests, and Solutions
- A Focus on Interests not Positions
- The Identification of Win-Win Solutions
- A Focus on the Future Instead of the Past
- Separation of the People from the Problem

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Problem Behaviors (1)

- The media is asleep at the switch and has largely ignored the real extent of the crisis.
- The media has vastly overblown the potential for problems and is unnecessarily scaring the public.
- The utilities are dragging their feet and flirting with disaster.
- Nobody has recognized the substantial effort of the utilities to mitigate the problem.
- Utilities have not shared enough information.

Problem Behaviors (2)

- Commissions are getting in the way of utility efforts by demanding too much information.
- Investors haven't been given enough information about utility Y2K efforts to make investment decisions.
- Wall Street is attempting to trade on Y2K information.
- Contingency planning is being done in isolation.

Problem Behaviors (3)

- Too much money has been spent on the problem.
- Not enough money has been spent on it.
- State commissions haven't done enough and what they have done is mostly CYA.
- Commissions have approached this problem with the traditional regulatory hammer.
- The attorneys are circling like vultures and making things worse.

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Issue #1: How can we ensure the flow of necessary information?

Interests:

- I Utilities: Minimize legal liabilities; gather information with which to mitigate the problem; protect shareholder value; get credit for action
- I Investors: Gather adequate information to make investment decisions.
- I Commissions: Gather enough information to evaluate overall and individual utility progress; avoid panic; ensure free flow of information necessary for mitigation.
- I Public: Identify risks and evaluate options

HRRI

Issue #2: How can we ensure prudent investment and fair allocation of costs?

Interests:

- I Utilities: Protect mission critical functions without endangering the financial health of the firm
- I Commissions: Mitigate system reliability risks without unduly burdening ratepayers; fair division of costs between ratepayers and shareholders
- I Ratepayers: Minimize costs allocated to ratepayers
- Shareholders: Protect firm financial viability and maximize shareholder return

NEE

Issue #3: How can system reliability be best protected?

Interests:

- I Utilities: Minimize outside interference; the establishment of public policies that allow a focus on mission-critical functions
- I Consumers: Protection of "my system"
- 1 Commissions and policy makers: Adequate attention to issues of system reliability, health, and safety; protection of societal interdependence/broad social welfare

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Issue #4: Contingency planning?

■ Interests:

- Utilities: Establishment of contingency plans that isolate functioning systems from non-functioning systems, allow for continuing operations of mission critical systems, allow fast recovery.
- I Commissions: Establishment of contingency plans that allow for rapid recovery, operation of mission critical systems, and protection of public health and safety

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Over-riding Shared Interests

- Avoidance of catastrophic system failure
- Protection of the service delivery system and system reliability
- Maintenance of public confidence
- Establishment of working relationships with other parties

|--|--|

Next Steps: Identification of Solutions

- Solutions:
 - I Must recognize and address all interests
 - I Must focus on the future
 - I Should be concrete and doable
- Limits of the Mediation Model
 - I The "ability to settle"
 - 1 Time
- Expected outcome:
 - I Generation of ideas and recommendations
 - I Shared understanding

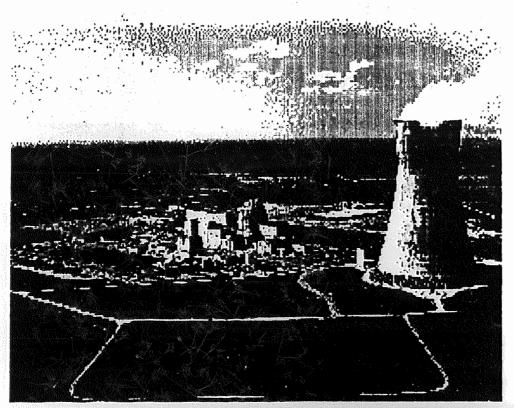
HBBI

2000 rear 2000





Ameren Year 2000 Project Management



- Nuclear Safety
 - Terry Baxter
- Callaway Y2K Status
 - Michael McCrady
- Ameren Y2K Status
 - Winston Freund



- Regulatory Agencies
 - NRC Letter from the Office of the Secretary (SECY 97-213) states "safety-related initiation and actuation systems are not subject to the Year 2000 concern."
 - NEI/NERC/NUSMG, after 14 months of data collection, have no issues that contradict the SECY letter.



- NRC Y2K Audits have uncovered NO Y2K issues associated with any component necessary for Safe Shutdown.
 - September 1998
 - Monticello, Minnesota
 - Seabrook, New Hampshire
 - Brunswick, North Carolina
 - October 1998
 - Hope Creek, New Jersey
 - Davis Besse, Ohio

- November 1998
 - Wolf Creek, Kansas
 - Watts Bar, Tennessee
 - Limerick, Pennsylvania



 Comparisons with other facilities and industry databases help assure no safety components were missed.

- EPRI

Wolf Creek (Sister Plant)

– NEI – INPO

- NRC - NUSMG

– IEEE – NERC



• NRC requires reports (as specified in Title 10 CFR Part 21) from nuclear power plants when a facility, activity, or basic component fails to comply with the *Atomic Energy Act of 1954*, as amended, or other NRC regulations.

THERE HAVE BEEN NO REPORTS FILED AS A RESULT OF Y2K!



- Callaway Nuclear Power Plant
 - 1960s Design
 - 1970s Construction
 - Primarily Analog
 - Plant is old enough that it is an analog designed Plant, but is new enough not to have had many digital upgrades



- Callaway, like all other nuclear power plants, is required to implement and maintain a tested emergency plan (EP)
- Many of the hypothesized Y2K scenarios would cause the same problems for which the EP was developed and personnel trained to mitigate
- The EP is drilled and tested annually and is evaluated by the NRC at least once every two years



- Westinghouse (nuclear supplier) is performing an independent assessment of selected safety systems and has found no Y2K issues to-date.
- All Project data collected by EPRI, NEI, NERC and Callaway continues to support the NRC's SECY-97-213 Letter indicating there are NO Y2K related safety issues.



- Callaway's Year 2000 Project began Software Remediation in 1986
- Year 2000 Hardware Remediation began in the Fall of 1996



- Nuclear power, as of November 30, 1998
 - 43 internal QA audits completed
 - 22 cross utility audits completed
 - 39 independent 3rd party audits completed
 - 10 audits in progress or scheduled near term
 - 12 NRC audits conducted or scheduled

No Safety Issues have been found



- The Callaway Y2K Program has been internally audited by the nuclear Quality Assurance Department.
 - No major weaknesses
 - Program is in accordance with NEI/NUSMG
 97-07 Year 2000 document
 - No safety issues



Callaway Y2K Status

- ~30% AmerenUE Power (MO)
- No issues identified that could force a shutdown or affect safety of the plant
- Callaway will be Y2K Ready (online and safe)
- NRC Report due 7/1/1999
 - Where at and what is left to do
 - We expect to be ready by report date



Callaway Y2K Status

- 73 % complete overall
- 96 % complete with mission critical items*
- 100 % complete with mission critical by end of year

* NERC Definition: misoperation of the item could directly contribute toward a loss of a 50MW or larger generating resource. (North American Electric Reliability Council)



Year 2000 Organization Chart

Program Management
Team

Function Area
Teams
30 Teams



What does Year 2000 compliance mean?

• "Year 2000 <u>compliant</u> components are capable of correct identification, manipulation, and calculation using dates through the millennium transition into the 21st century."

What does Year 2000 readiness mean?

• "Year 2000 <u>ready</u> components have been determined to be suitable for continued use into the 21st century even though the component is not fully Y2K compliant."





Missouri Public Service Commission Case No. 00-99-43

-- Original Question -What is the date at
which you expect to be
fully Year 2000 compliant?

We do not expect to be fully compliant. There are certain components and applications that are not mission critical and that we will let fail, such as a FAX machine.

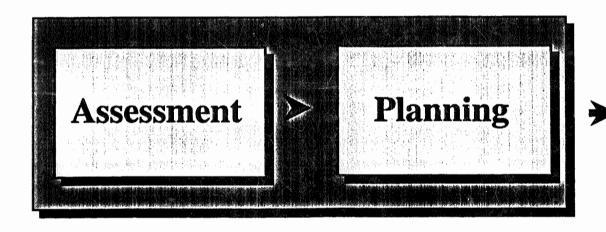
----- Original Response -----

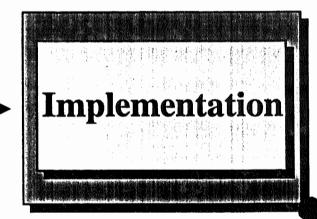
----- Result Field -----Planned Date for Year
2000 Compliance

----- Result Response -----Ameren does not plan to be
fully compliant



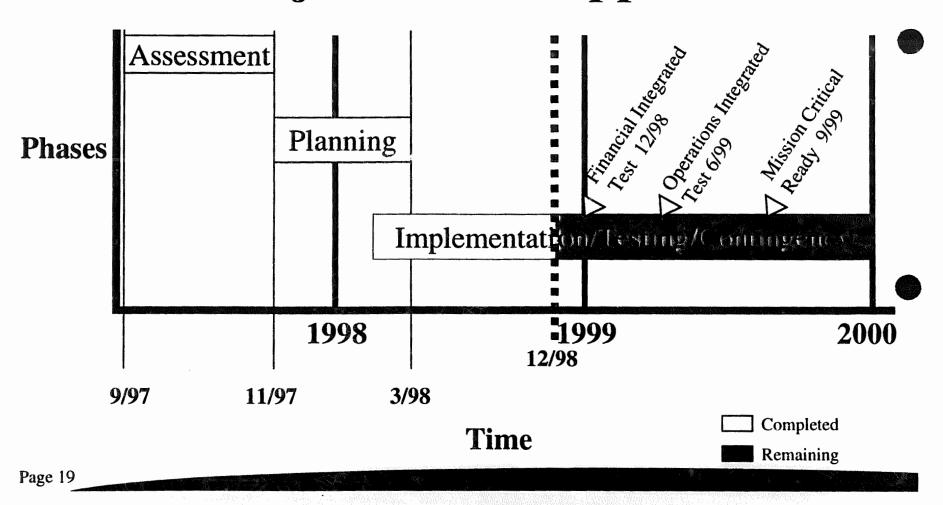
Year 2000 Phases







Project Phased Approach





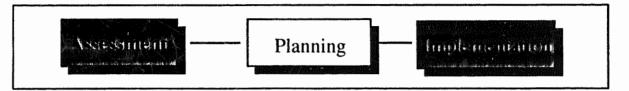




Objectives

- > Determine the overall scope and scale of impact of the Year 2000 issue
- > Identify components which are not Year 2000 compliant
- > Provide a strategic view of what needs to be done, when, and how.
- ➤ Determine the approximate level of effort required to solve the Year 2000 issues





Objectives

- > Break the overall program into a set of separately schedulable and manageable projects
- > Develop work plans for the identified projects
- > Establish management and development processes
- > Establish standards and identify tools







Objectives

- ➤ Establish a common framework under which the project will proceed and confirm the scope against which the project will be managed
- Achieve consensus among the project team, users, and management for the objectives, roles, constraints, and assumptions for the project
- ➤ Analyze and modify programs so that they will continue to operate correctly
- > Review and create contingency plans
- Validate and implement changes



STATUS

Assessment Phase

- 100% complete

Planning Phase

- 100% complete

Implementation Phase

- 45% complete (overall as of 12/1)

- 38% complete (mission critical)*

^{*} NERC Definition: misoperation of the item could directly contribute toward a loss of a 50MW or larger generating resource. (North American Electric Reliability Council)





Contingency Plans

- 12/31/1998 First Draft of operational plan submitted to MAIN*
- 3/31/1999 First draft of integrated corporate-wide plan

• Industry-wide drills

- 4/8/1999 4/9/1999
- 9/8/1999 9/9/1999

^{*} Mid-America Interconnected Network, Inc. (MAIN)



Questions?



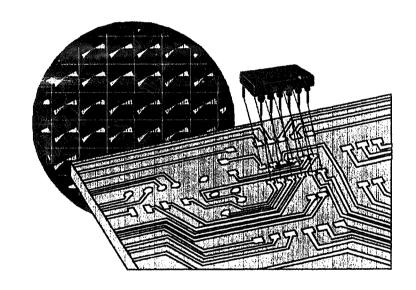
Missouri PSC Year 2000 Conference December 16, 1998



OBJECTIVE

Provide an overview of GTE's Year 2000 Program

- Project Scope
- Approach
- Status
- Communications





Y2K PROGRAM OBJECTIVE

GTE's Year 2000 remediation efforts are designed to make a seamless transition into the Year 2000 without serious interruption to our network or measurable adverse impact on GTE customers.





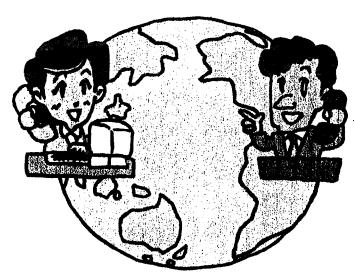
GTE OVERVIEW

One of the largest publicly held telecommunications companies

- Network Services provides local exchange operations in 28 states
- Long distance service is available in all 50 states
- International operations in 14 countries

Y2K PROGRAM SCOPE

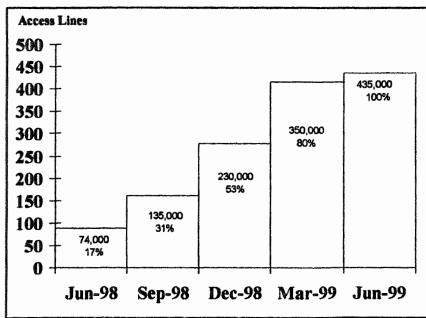
- Established Corporate Program Office in 1995
- Program offices established in each of 13 major business units world-wide
- Estimated cost for Y2K compliance -- \$370M
- 1,200 full time employees addressing Y2K issues
- 324 Applications converted
- 408 Systems going through FACT Testing
- 11,318 Vendor supplied products under review (Approximately 80% not date sensitive or scheduled for upgrade.)





Wireline Public Switched Telephone Network Schedule Status -- Missouri





Access Lines as a function of expected Central Office Y2K Conversion

• Compliant Central Office Switch Rollout Schedule

% of Lines Within State of Missouri	Scheduled Completion
20.6% - GTD-5	4th Quarter '98
.7% - 5ESS	Complete
41% - DMS 100	1st Quarter '99
19.7% - DMS 10	2nd Quarter '99
16.1% - DCO	Complete

• Frame Relay Networks

1.9% - Misc Other

AIN products

Complete

4th Quarter '98

4th Quarter '98

GTE Proprietary & Confidential



Y2K STANDARD INDUSTRY MODEL

End User Computing

- Desktop Hardware: PCs/Workstations, Printers, Scanners
- · Desktop Applications

- Laptops
- Servers

Internal Business Applications

- · Customer Billing
- Service Activation
- Service Fulfillment
- Inventory Management
- Human Resources

- Finance
- Network Engineering
- Infrastructure Provisioning
- Regulatory/External Reporting

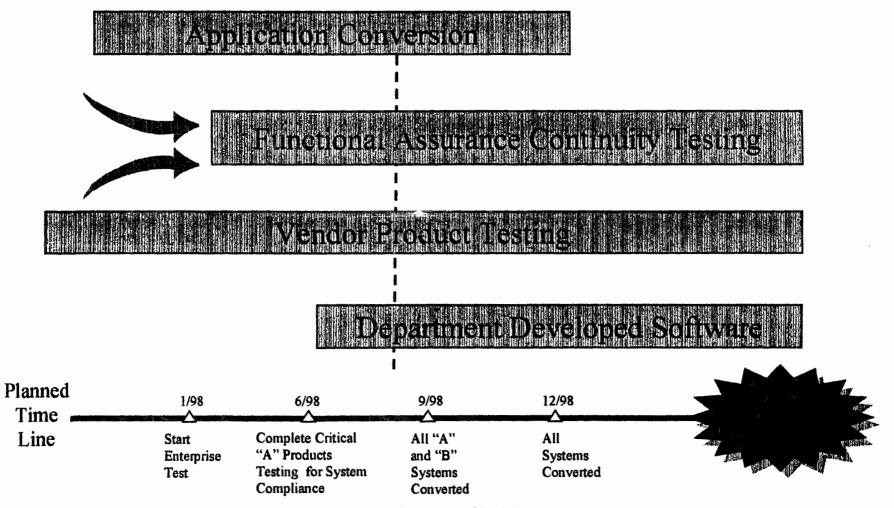
Inventory > Impact Analysis > Remediation/Replacement/Conversion Testing (FACT)

FORWARD COMPLIANCE

Vendor (3rd Party) Products PSN/CPE **Support Assets Computing Infrastructure** · Host/Remote Switching Transport Buildings Mainframe HVAC, Alarms, Emergency · Distributed Client Server · Directory Assistance Alarms • Minicomputer · Network Monitoring • SS7 Power • Maintenance/Diagnostics · Office Support • E 911 Internal Networks Recorders/Announcers PBX Copiers, Faxes Fleet • Interactive Voice Response Aircraft, Special Tools · Database Management



INTEGRATED TESTING IS KEY





Telco Year 2000 Forum

- Voluntary, exclusively Y2K focused, self-funded group formally established in January 1997 to address issues potentially impacting the telecommunications industry.
- Member Companies include: Ameritech, Bell Atlantic, Bell South, Cincinnati Bell, GTE, SBC, SNET, and US West.

Service Clusters (Essential Elements of PSTN)



- Emergency Services (911)
- Basic, Enhanced and Intelligent Network Services (e.g., O+, 1+, 800, CLASS, Routing, etc.)
- Network Management Systems (operating support systems and element managers)
- Data Transport Services (e.g., ATM, Frame Relay, etc.)



What Do Customers Need To Do?

Customers

- Residential
- Business

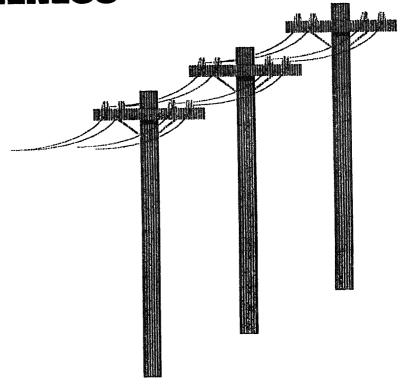
Information regarding many business telecommunications systems products can be obtained from original equipment manufacturer's or discuss with GTE sales representative.



Y2K AWARENESS

Internal
Employees
Management

External
Customers
SEC
FCC
State Commissions
Community Groups
General Public





GTE YEAR 2000 WEBSITE www.gte.com/y2k

GTE Year 2000 Website Includes:

- Key Schedule Dates
- Criteria for Year 2000 Compliance
- Overview of GTE's Year 2000 Approach and Program
- Frequently Asked Questions (FAQs) Taken From Customer Inquiries
- Links to Telecommunication Industry Year 2000 sites



Conclusion

GTE believes, as does the other major telecommunication carriers, the United States Public Switched Telephone Network will continue to operate with no major service disruptions due to Year 2000 issues.

Y2K FORUM DECEMBER 16, 1998 EVALUATION RESULTS

- 1. Q. Which session did you attend that was the most valuable to you and why?
 - A. AmerenUE Callaway Nuclear Power Plant.
 - •Emergency Preparedness: SEMA Session was the most useful. Robb Pilkington was very candid and I thought useful information was conveyed.
 - •Missouri CIO (Benzen) Excellent and realistic information. Also enjoyed the "open" discussion at Contingency Planning.
 - •Morning Broad range of useful information.
 - Everything I attended was extremely valuable. Good communications will help this challenge.
 - •AmerenUE I am working on a Y2K project at UE. Pat Baumhoer Very good information presented that affects everyone. "Real life" examples to take care of the explanation. Breakout sessions were good too.
 - •Contingency Planning.
 - •Contingency Planning dialogue.
 - •All of the sessions were equally valuable.
 - •Contingency Planning and Due Diligence were both helpful. Although mostly an overview of what we are already doing, I did get some insight on a few new ideas.
 - •Contingency Planning and Due Diligence.
 - •I actually picked up something valuable from each session.
 - •1st Billing 2nd Securities and Tax Issues Needed update.
 - •Contingency Planning was the most valuable because the way it was structured. Topics were brought up and were opened up to discussion.
 - Morning session. Good speakers. Mike Benzen was good.
 - •Emergency Preparedness.
 - •Contingency Planning Gain some knowledge of other companies ideas for planning.
 - •Pat Baumhoer and Dave Evans.

- •Contingency breakout due to the interaction of participants.
- •Securities and tax issues. A lot of new ideas were introduced.
- Contingency Planning.
- •Public Relations. Public participation is the biggest problem.
- •Missouri and Y2K by Michael Benzen. Very logical presentation regarding practical view of Y2K.
- •Contingency Session.
- •All were excellent. Very valuable.

2. Q. Which session did you attend that was the least valuable to you and why?

- A. •Securities and Tax Issues. Probably the least related to what I do (PSC).
 - •David Wirick's 9:30 talk was least valuable. Methods/quantitative analysis techniques are what got us in this mess. We need community, common sense and God to help.
 - Securities and Tax Issues (legal). Nothing new and not always completely accurate.
 - •Afternoon-Leaders seemed to be unprepared for a lengthy presentation.
 - •None deemed "least valuable".
 - Opening comments.
 - •Both sessions were helpful.
 - •All were very helpful and valuable.
 - •SEMA-Discussion not directly related.
 - •I was expecting a little more information from the public relations segment. Such as, what types of things should we tell the public to reassure them.
 - •PSC Preparedness. The ability for PSC to be Y2K compliant is not a mission critical function to providing continued service.
 - •Banking. I believed that the time-line presented was very unrealistic.
 - •I only attended two. Contingency Planning and Public Relations. Both were good.
 - •Y2K: Where Do We Go From Here? Not much substance.
 - Billing.
 - •All good.

3. Q. Would you like to see Y2K topics addressed at future Commission roundtable meetings or other Commission conferences?

- A. •Yes 25
 - •No 1
 - •No Response 1
 - Comments
 - •Definitely. Perhaps at Rate Symposium this Spring, or at an FRI gig.
 - •Industry-specific meetings; i.e., ILECs, CLECs, topics specific to resellers.
 - Discussion among utilities/sharing of ideas is very helpful.
 - •Yes. Perhaps to share some appropriate questions to ask to third party service providers to help check their Year 2000 Readiness.
 - •I feel it is vital that the State Departments and Governor's Office set up a constant media campaign as to progress on Y2K. Need a constant coordinated message from government and utilities.
 - •Examples of reports-Contingency plans so our utility might catch something we missed in our plan.
 - •It might be helpful.
 - •Quick half-day meeting to review progress maybe quarterly.
 - Absolutely.

4. Q. Please provide any specific topics you would like addressed at future meetings.

- A. More on contingency planning and testing.
 - •Web-site development; discussion on Y2K resources; legal matters.
 - Vendor contacting strategies.
 - •Trading of contingency plans.
 - •More opportunities to interact with other utilities regarding how other utilities are addressing common issues.
 - •Perhaps a meeting geared more specifically to the natural gas distribution industry.
 - •Customer service response; Billing; Communication.
 - •Don't know if a conference, a forum or a workshop would be best.
 - Specific finds and solutions.

- •Information from vendors on what they suggest we do if their system fails; i.e., phone companies on back up communication or emergency lines available.
- •Specific operational areas most vulnerable to Y2K problems.
- •Contingency planning.
- •Gas and electric billing.
- •Contingency plans must be made with a level of reliable information from all of the interrelated utilities. This is not happening.
- •How to deal with media (and others) regarding this issue.
- •More information on public relations.
- •Contingency planning.

5. Q. Please tell us how the forum could have been improved.

- A. •Break in the morning, make it earlier! 10:00 a.m.
 - •More on contingency planning and testing.
 - •More structure for breakout sessions.
 - •No suggestions.
 - •Roundtables/breakout sessions could be shorter.
 - •Focus on more broad-based utility service rather than focusing so much on the electric industry.
 - •Facilities-Room was freezing.
 - •I thought this turned out pretty well. The more information being shared, the better!
 - •Breakout sessions devoted to exclusive electric, gas,
 - telecommunications, water and sewer issues. Invite some of the vendors promising compliance to discuss issues.
 - •More work sessions.
 - •Have a follow-up. This was very informative.
 - •Very good overall. Needed.
 - •Everything was well done.

NOTE: There were 150 participants at the Y2K Forum. Of that number, 27 participants turned in completed evaluation forms.