

MINUTES OF THE SENATE COMMITTEE ON LABOR, INDUSTRY AND TOURISM

The meeting was called to order by Sen. Bill Morris at
Chairperson

1:30 ~~xxxx~~ p.m. on Tuesday, February 14, 1984 in room 529-S of the Capitol.

All members were present ~~except~~ .

Committee staff present:

Jerry Ann Donaldson, Research Department
Gordon Self, Revisor
Louise Cunningham, Secretary

Conferees appearing before the committee:

Rob Hodges, KCCI
Wayne Maichel, AFL-CIO
Paul Bicknell, Department of Human Resources
Bill Ewing, Southwestern Bell Telephone Company
Jeff Russell, United Telephone Company
Bob Bonn, ATT

H.B. 2629 - Employment Security; relating to benefits and contributions.

Rob Hodges, KCCI, explained the 1983 legislative changes in the Kansas unemployment system. (Attachment 1). He said the bill was the recommendation of the interim committee. The Advisory Council had studied the funding needs of the Trust Fund and the changes were incorporated into this bill. The wage base was changed from \$7,000 to \$8,000; the maximum weekly benefit amount was established at \$175; and the computation rates were changed. The changes would bring the amount of taxes to be generated from employers from \$127.9 million in 1983 to \$150.1 million in 1984. These changes were made to be sure the fund remained solvent. When H.B. 2221 was enacted last year several members thought it was only a "band aid" approach and that perhaps a flat rate could be assessed. The Advisory Council thought that some of the ideas were possible but were not practical. One remaining problem is "bunching" where four groups (18,19,20 and 21) are assessed at the maximum rates. When that happens the funding mechanism of one group is subsidizing someone else.

The question was raised as to what assurances the committee had that the rates would not be changed again. They were told the rates could be changed every year. The Advisory Council felt that with the economic turnaround these rates would take care of the situation for longer than a year. It is very difficult to forecast when changes will be necessary.

Wayne Maichel, AFL-CIO, said no one could predict what would happen in five or ten years.

Paul Bicknell, DHR, said if balances increase the rates would reduce uniformly.

Gordon Self, Revisor, said there were some technical amendments that should be made on the bill. On page 16, line 593 should have a period; lines 736 and 742 reference is made to Supps. This should be left in. A motion was made by Sen. Burke to conceptually make the necessary changes in the bill. Motion was seconded by Sen. Feleciano. Motion carried.

A motion was made by Sen. Arasmith to recommend H.B. 2629 as amended, favorably for passage. Motion was seconded by Sen. Burke. Motion carried.

Sen. Gordon said he realized this was needed but rather than to continually increase and make adjustments in the rates, we should cut back on people who walk off their jobs and still draw on the Fund. This makes it hard on the rest of the employers in the state.

(over)

CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON LABOR, INDUSTRY & TOURISM,
room 529-S, Statehouse, at 1:30 ~~xxx~~/p.m. on February 14, 19 84

S.B. 629 - An act concerning safety in hazardous underground work spaces.

Mr. Bill Ewing, Southwestern Bell, spoke in opposition to S.B. 629. He said the telephone company had a safety record that was the envy of most businesses in the country. Safety is always stressed. Kansas has approximately 7,100 manholes in the state. There have been injuries but most of the injuries have occurred above ground, rather than below ground. Workers have the prerogative of asking for additional help if they feel it is necessary. A copy of his statement is attached. (Attachment 2). He was asked about the possibility of a worker being left in a manhole overnight in case of an accident. Mr. Ewing said the supervisor knows where the worker is located and generally there is some communication. He can tap into a cable. Also, if he did not report back at 5 o'clock someone would be looking for him. The workers have radios in their trucks and splicers working on cables underground would have contact with the test board. Mr. Ewing said they did not anticipate having any problems with OSHA. Mr. Ewing said injuries in manholes were not a problem when safety procedures are followed.

Mr. Jeff Russell, United Telephone Company, said his company was constantly striving to ensure the safety of employees and employee training is ongoing. The spaces are tested for gas and they continuously ventilate the space with a manhole blower. A copy of his statement is attached, along with the proposed OSHA legislation. (Attachment 3).

Mr. Robert Bonn, ATT, said he had been with the company for 36 years, 13 of these years were in the safety division. He brought along a communication set which the employee used in the manhole and said they had radios in the trucks. They report back to the supervisor at least three times a day. He also showed the committee a gas indicator test kit which they used in testing for gas. These gas indicators are tested with bottled gas prior to leaving for the worksite. Most employees would rather work below the ground and consider it safer than above ground. There are more injuries due to traffic above ground. If the employee feels there is a hazard he can request help.

Adding an additional employee outside the workspace to provide emergency assistance would unnecessarily expose the employee to the hazards of traffic, increase the potential for injury in travel to and from the worksite, and increase operating costs. A copy of his statement is attached. (Attachment 4).

Meeting was adjourned.

SENATE LABOR, INDUSTRY & TOURISM COMMITTEE

Date 2-14 Place 529-S. Time 1:30

GUEST LIST

NAME

ADDRESS

ORGANIZATION

JEFF RESSO	TOR,	UNITED TELEPHONE
DAN MORGAN	"	AGC of KS.
Rob Holm	Topeka	KCC
Steve Goodman	Topeka	Dept. Human Resources
Lynn Amen	Topeka	CWA
Wayne Maichel	Topeka	Kansas AFL-CIO
Bill Laine	Topeka	Dept. Human Resources
Paul Becknell	Topeka	" " "
Don Hoffman	" "	CWA
Jerry L. Perrin	Topeka	CWA
John J. Blankenship	Topeka	CWA
Wayne Kitchen	Topeka	KS Dept. Human Resources
Ken Barber	RC	CWA
RICK FENEWOLD	TOPEKA	AT&T
BOB BOXX	PRAIRIE VLG, KS.	AT&T

(1)

1983 Legislative Changes in the Kansas Unemployment Compensation System

The 1983 session of the Kansas Legislature enacted legislation which resulted in several changes in the Employment Security Law. Those changes affect both the level of employer contributions to, and benefit payments from, the Employment Security Trust Fund. Significant changes are described below.

1. The fund control schedule was revised to produce an increase in contributions (taxes) to the Fund.
2. The wage base on which employer contributions (taxes) are collected was changed from \$6,000 up to \$7,000 to conform with changes in federal law.
3. The maximum employer contribution (tax) rate was increased from 4.3% up to 5.4%
4. All negative account balance employers are now required to pay contributions (taxes) at the maximum rate of 5.4%. Further, negative balance employers pay a surcharge ranging from .1% up to 1.0%, depending on the size of their negative balance.
5. The contribution (tax) rates assigned to new employers were increased by 1%.
6. A 20% surcharge was assessed against all Kansas contributing employers for CY 1983. The same 20% surcharge can be assessed in CY 1984 if the balance in the Employment Security Trust Fund is less than \$80 million on April 30, 1984, as determined by the Secretary of Human Resources.
7. The Secretary of Human Resources is authorized to impose additional surcharges under certain circumstances. Any such additional surcharge would be based on the balance in the Employment Security Trust Fund falling below \$35 million.
8. The state's maximum weekly benefit amount for FY 1984 (beginning July 1, 1983) was frozen at the FY 1983 level (\$163). The freeze can remain in effect for FY 1985 if the balance in the Employment Security Trust Fund is less than \$80 million on April 30, 1984, as determined by the Secretary of Human Resources.
9. Benefit amounts paid are now rounded down to the next lowest dollar multiple.
10. Employer successorship provisions were changed and authorization was granted for KDHR to interplead in probate proceedings.

Atch. 1

1984 Tax Yield Requirements**

Trust Fund Balance 7/31/83 \$ 166.2 million
 Total Payrolls for FY 1983 \$10,725.0 million = 1.55 %
 (Reserve Fund Ratio)

<u>Reserve Fund Ratio</u>	<u>Planned Yield</u>
5.00% and over	0.40%
4.75 but less than 5.00	.50
4.50 but less than 4.75	.60
4.25 but less than 4.50	.70
4.00 but less than 4.25	.80
3.75 but less than 4.00	.85
3.50 but less than 3.75	.90
3.25 but less than 3.50	.95
3.00 but less than 3.25	1.00
2.75 but less than 3.00	1.05
2.50 but less than 2.75	1.10
2.25 but less than 2.50	1.15
2.00 but less than 2.25	1.20
1.75 but less than 2.00	1.30
----- 1.50 but less than 1.75	1.40 -----
1.25 but less than 1.50	1.50
1.00 but less than 1.25	1.60
Less than 1.00	1.70

Total Payrolls for FY 1983 \$10,725.0 million
 Taxable Wages for FY 1983 \$ 4,427.7 million = 2.42%

2.42 Ratio of Total to Taxable Wages
 x 1.40 Planned Yield
 3.39% Adjusted Planned Yield Percentage

Taxable Wages for FY 1983 \$4,427.7 million
 Adjusted Planned Yield %age x 3.39 %

Amount of taxes to be
 generated from employers \$ 150.1 million

** All figures on this sheet are based on figures provided
 by the Kansas Department of Human Resources.

Rate Group	1983 U.C. Rates 2/22/83*	Maximum Tax Per Employee	Rates Including Surcharge	Maximum Tax Per Employee	1984 U.C. Rates at \$7,000 Base	Maximum Tax Per Employee	1984 U.C. Rates at \$8,000 Base	Maximum Tax Per Employee
1	.07%	\$ 4.90	.08%	\$ 5.60	.08%	\$ 5.60	.06%	\$ 4.80
2	.28	19.60	.34	23.80	.33	23.10	.25	20.00
3	.56	39.20	.67	46.90	.67	46.90	.51	40.80
4	.84	58.80	1.01	70.70	1.00	70.00	.76	60.80
5	1.12	78.40	1.34	93.80	1.34	93.80	1.01	80.80
6	1.40	98.00	1.68	117.60	1.67	116.90	1.26	100.80
7	1.68	117.60	2.02	141.40	2.01	140.70	1.52	121.60
8	1.96	137.20	2.35	164.50	2.34	163.80	1.77	141.60
9	2.24	156.80	2.69	188.30	2.67	186.90	2.02	161.60
10	2.52	176.40	3.01	210.70	3.01	210.70	2.27	181.60
11	2.79	195.30	3.35	234.50	3.34	233.80	2.53	202.40
12	3.07	214.90	3.68	257.60	3.68	257.60	2.78	222.40
13	3.35	234.50	4.02	281.40	4.01	280.70	3.03	242.40
14	3.63	254.10	4.36	305.20	4.34	303.80	3.29	263.20
15	3.91	273.70	4.69	328.30	4.68	327.60	3.54	283.20
16	4.19	293.30	5.03	352.10	5.01	350.70	3.79	303.20
17	4.47	312.90	5.36	375.20	5.35	374.50	4.04	323.20
18	4.75	332.50	5.70	399.00	5.40	378.00	4.30	344.00
19	5.03	352.10	6.04	422.80	5.40	378.00	4.55	364.00
20	5.31	371.70	6.37	445.90	5.40	378.00	4.80	384.00
21	5.40	378.00	6.48	453.60	5.40	378.00	5.05	404.00

Negative Account Employers

-1	5.50%	\$385.00	6.60%	\$462.00	5.50%	\$385.00	5.50%	\$440.00
-2	5.60	392.00	6.72	470.40	5.60	392.00	5.60	448.00
-3	5.70	399.00	6.84	478.80	5.70	399.00	5.70	456.00
-4	5.80	406.00	6.96	487.20	5.80	406.00	5.80	464.00
-5	5.90	413.00	7.08	495.60	5.90	413.00	5.90	472.00
-6	6.00	420.00	7.20	504.00	6.00	420.00	6.00	480.00
-7	6.10	427.00	7.32	512.40	6.10	427.00	6.10	488.00
-8	6.20	434.00	7.44	520.80	6.20	434.00	6.20	496.00
-9	6.30	441.00	7.56	529.20	6.30	441.00	6.30	504.00
-10	6.40	448.00	7.68	537.60	6.40	448.00	6.40	512.00

* Rate includes permanent effects of changes made in HB 2221 (not solvency surcharge).

(2)

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, MY NAME IS BILL EWING. I'M A PUBLIC AFFAIRS MANAGER FOR SOUTHWESTERN BELL TELEPHONE COMPANY AND MY PURPOSE FOR BEING HERE TODAY IS TO SPEAK IN OPPOSITION TO SB 629.

THE BELL SYSTEM HAS ATTAINED A SAFETY RECORD WHICH HAS BEEN THE ENVY OF INDUSTRY AS A WHOLE. FROM THE TIME EVERY EMPLOYEE STARTS TO WORK IN OUR COMPANY, THE SUBJECT OF SAFETY IS COVERED ON A REGULAR BASIS. SAFETY HAS EVOLVED AS A WAY OF LIFE FOR SEVERAL REASONS. FIRST, WE HAVE ALWAYS HAD COMPASSION FOR OUR EMPLOYEES AND SECONDLY, WE HAVE A LARGE INVESTMENT IN THEM.

A FEW FACTS REGARDING UNDERGROUND WORK:

- A. WE HAVE APPROXIMATELY 700,000 MANHOLES NATIONWIDE AND EACH YEAR THERE ARE APPROXIMATELY 1.5 MILLION ENTRIES.
- B. OUR WORK SPACES ONLY HAVE TELEPHONE FACILITIES.
NOTE: NO ELECTRIC OR GAS FACILITIES IN SAME SUBWAY.
- C. STUDIES OF ACCIDENTS THAT HAVE OCCURRED OVER MANY YEARS SHOW THAT THERE ARE MANY MORE INJURIES IN CONNECTION WITH UNDERGROUND WORK WHICH OCCUR ABOVE GROUND THAN IN THE MANHOLE.

LET ME REVIEW STEP BY STEP THE PROCEDURES THAT WE INSIST OUR EMPLOYEES FOLLOW PRIOR TO ENTERING AN UNDERGROUND WORK SPACE.

1. PARK TRUCK IN SAME LINE AS MANHOLE. (DEPENDING ON TRAFFIC)
2. PLACE CONES, MEN WORKING SIGN AND BARRICADE AROUND MANHOLE.
3. REMOVE COVER WITH SPECIALLY DESIGNED TOOL.

Atch. 2

4. LOWER GUAGE INTO SPACE TO TEST FOR ANY CONDITION THAT MIGHT BE DETRIMENTAL TO EMPLOYEES HEALTH.
5. INSERT VENTILATING BLOWER AND TEST AGAIN BASED ON SIZE OF SPACE BEFORE ENTERING.
6. IF TEST IS CLEAR, ENTER SPACE NOW! (LEAVE BLOWER ON CONTINUALLY)
7. FOLLOW ITEM (4) IF WORK IN SPACE IS PERFORMED FOR TWO HOURS --
NOTE: 1 HOUR INTERVAL IF USING TENT.

NOTE: OUR SAFETY STANDARDS ARE COMPLETELY SANCTIONED BY OSHA STANDARDS.

EVEN THOUGH WE HAVE VERY STRINGENT SAFETY STANDARDS TO BE FOLLOWED IN CONNECTION WITH UNDERGROUND WORK, WE GO STILL A STEP FURTHER, Ex. IF AN EMPLOYEE GETS TO A MANHOLE WHERE THEY HAVE WORK TO PERFORM AND THE EMPLOYEE DETERMINES DUE TO TRAFFIC OR WEATHER CONDITIONS HE WILL NEED HELP TO GET SET UP, THEY ARE TO CALL THEIR SUPERVISOR BEFORE STARTING TO SET UP AND HE WILL ROUTE AN ADDITIONAL EMPLOYEE OR VISIT THE SITE TO DETERMINE IF NECESSARY. IF ADDITIONAL HELP IS NEEDED, THE SUPERVISOR WILL DISPATCH AN ADDITIONAL PERSON TO HELP SET UP AND ALSO TO RETURN TO HELP REMOVE CONES, BARRICADES, ETC.

SINCE THESE MANHOLES GENERALLY ARE IN DENSELY POPULATED AREAS, TRAFFIC IS BY FAR THE PARAMOUNT SAFETY CONCERN FOR OUR EMPLOYEES WELL-BEING. IT THEREFORE, IS UNREASONABLE TO REQUIRE THAT AN ADDITIONAL EMPLOYEE BE EXPOSED TO THIS SAFETY HAZARD.

SENATE COMMITTEE ON
LABOR, INDUSTRY AND TOURISM

SB 629

February 14, 1984

The United Telephone Company of Kansas would like to thank the Committee for the opportunity to testify this afternoon. I am Jeff Russell, Governmental Affairs Director for United. We serve approximately 66,000 customers in 109 communities in Kansas, as the second largest telephone company in the State. I am here to speak in opposition to SB 629.

United of Kansas has always considered safety of the utmost importance. Staffed with several employees whose full-time jobs are safety, who are supported by tried and proven safety methods, equipment, and the latest information, we are continuously striving to ensure the safety of our employees.

It is the policy of our company that our employees do not enter into a confined space without testing for combustible gas, purging and continuously ventilating the space with a manhole blower. Employee training in this regard is ongoing. The existing Practices are used as training materials, and classes are held at our training center. In addition, a slide tape and booklet education program will be implemented in 1984 to supplement the more formal classroom training.

Atch. 3

The lifeline and oxygen masks in Section 3 of the bill, Numbers 1 and 3, appear to be designed for rescue from a confined space. The United System policy on this matter is for employees not to enter confined spaces to attempt a rescue, but rather to neutralize the source of danger or contamination and call a local rescue squad who is trained and equipped to handle such emergencies.

Line 46 on the bill addresses an extra employee to be outside the manhole when anyone is working inside. Our System practice only requires an extra employee when a flame is used. The OSHA Telecommunications Standard #1910.268 only requires an employee on top of a confined space if it is a joint use space, and does not preclude a qualified employee entering into these joint use spaces for brief periods without this second person on top.

It is my opinion that this bill would be an unnecessary burden on our resources and productivity of our employees. The precautions we take in our company for confined space entry have been proven safe and effective. By recognizing the hazards of this type of work, we are continually updating our procedures, equipment and training in this important area.

Senate Bill 629
Page Three

In closing I would say that to my knowledge, the United System and United of Kansas have not sustained a death or serious injury by anyone using the correct work procedures for confined space entry. The weakest link is the lack of employee effort and understanding - which we are constantly improving upon through training.

I have provided copies of relative practices for your information on this topic.

Thank you again for the chance to address the Committee today. I'll be happy to try to answer any questions you may have.

Respectfully submitted,

Jeffrey M. Russell
Director of Governmental Affairs
United Telephone Company of Kansas

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insulating blanket, a fiberglass box guide, or equivalent protective equipment.

(b) In joint lines where the power voltage is greater than 8.7kV phase to phase (5kV to ground) but less than 34.5kV phase to phase (20kV to ground), dry poles being placed, moved, or removed shall be insulated with either a rubber insulating blanket, a fiberglass box guide, or equivalent protective equipment.

(c) Where wet or dry poles are being removed, insulation of the pole is not required if the pole is cut off 2 feet or more below the lowest power wire and also cut off near the ground line.

(iv) Insulating gloves shall be worn when handling the pole with either hands or tools, when there exists a possibility that the pole may contact a power conductor. Where the voltage to ground of the power conductor exceeds 15kV to ground, Class II gloves (as defined in ANSI J6.6-1971) shall be used. For voltages not exceeding 15kV to ground, insulating gloves shall have a breakdown voltage of at least 17kV.

(v) The guard or insulating material used to protect the pole shall meet the appropriate 3 minute proof test voltage requirements contained in the ANSI J6.4-1971.

(vi) When there exists a possibility of contact between the pole or the vehicle-mounted equipment used to handle the pole, and an energized power conductor, the following precautions shall be observed:

(a) When on the vehicle which carries the derrick, avoid all contact with the ground, with persons standing on the ground, and with all grounded objects such as guys, tree limbs, or metal sign posts. To the extent feasible, remain on the vehicle as long as the possibility of contact exists.

(b) When it is necessary to leave the vehicle, step onto an insulated blanket and break all contact with the vehicle before stepping off the blanket and onto the ground. As a last resort, if a blanket is not

available, the employee may jump cleanly from the vehicle.

(c) When it is necessary to enter the vehicle, first step onto an insulating blanket and break all contact with the ground, grounded objects and other persons before touching the truck or derrick.

(12) **Working position on poles.** Climbing and working are prohibited above the level of the lowest electric power conductor on the pole (exclusive of vertical runs and street light wiring), except:

(i) where communications facilities are attached above the electric power conductors, and a rigid fixed barrier is installed between the electric power facility and the communications facility, or

(ii) where the electric power conductors are cabled secondary service drops carrying less than 300 volts to ground and are attached 40 inches or more below the communications conductors or cables.

(13) **Metal tapes and ropes.**

(i) Metal measuring tapes, metal measuring ropes, or tapes containing conductive strands may not be used when working near exposed energized parts.

(ii) Where it is necessary to measure clearances from energized parts, only nonconductive devices shall be used.

(o) **Underground lines.**

The provisions of this paragraph apply to the guarding of manholes and street openings, and to the ventilation and testing for gas in manholes and unvented vaults, where telecommunications field work is performed on or with underground lines.

(1) **Guarding manholes and street openings.**

(i) When covers of manholes or vaults are removed, the opening shall be promptly guarded by a railing, temporary cover, or other suitable temporary barrier which is appropriate to prevent an accidental fall through the opening and to protect em-

STANDARDS AND INTERPRETATIONS

ployees working in the manhole from foreign objects entering the manhole.

(ii) While work is being performed in the manhole, a person with basic first aid training shall be immediately available to render assistance if there is cause for believing that a safety hazard exists, and if the requirements contained in paragraphs (d) (1) and (o) (1) (i) of this section do not adequately protect the employee(s). Examples of manhole worksite hazards which shall be considered to constitute a safety hazard include, but are not limited to:

(a) Manhole worksites where safety hazards are created by traffic patterns that cannot be corrected by provisions of paragraph (d) (1) of this section.

(b) Manhole worksites that are subject to unusual water hazards that cannot be abated by conventional means.

(c) Manhole worksites that are occupied jointly with power utilities as described in paragraph (o) (3) of this section.

(2) Requirements prior to entering manholes and unvented vaults

(i) Before an employee enters a manhole, the following steps shall be taken:

(a) The internal atmosphere shall be tested for combustible gas and, except when continuous forced ventilation is provided, the atmosphere shall also be tested for oxygen deficiency.

(b) When unsafe conditions are detected by testing or other means, the work area shall be ventilated and otherwise made safe before entry.

(ii) An adequate continuous supply of air shall be provided while work is performed in manholes under any of the following conditions:

(a) Where combustible or explosive gas vapors have been initially detected and subsequently reduced to a safe level by ventilation,

(b) Where organic solvents are used in the work procedure,

(c) Where open flame torches are used in the work procedure,

(d) Where the manhole is located in that portion of a public right of way open to vehicular traffic and/or exposed to a seepage of gas or gases, or

(e) Where a toxic gas or oxygen deficiency is found.

(iii)

(a) The requirements of paragraphs (o) (2) (i) and (ii) of this section do not apply to work in central office cable vaults that are adequately ventilated.

(b) The requirements of paragraphs (o) (2) (i) and (ii) of this section apply to work in unvented vaults.

(3) Joint power and telecommunication manholes. While work is being performed in a manhole occupied jointly by an electric utility and a telecommunication utility, an employee with basic first aid training shall be available in the immediate vicinity to render emergency assistance as may be required. The employee whose presence is required in the immediate vicinity for the purposes of rendering emergency assistance is not to be precluded from occasionally entering a manhole to provide assistance other than in an emergency. The requirement of this paragraph (o) (3) does not preclude a qualified employee, working alone, from entering for brief periods of time, a manhole where energized cables or equipment are in service, for the purpose of inspection, housekeeping, taking readings, or similar work if such work can be performed safely.

(4) Ladders. Ladders shall be used to enter and exit manholes exceeding 4 feet in depth.

(5) Flames. When open flames are used in manholes, the following precautions shall be taken to protect against the accumulation of combustible gas:

STANDARDS AND INTERPRETATIONS

(i) A test for combustible gas shall be made immediately before using the open flame device, and at least once per hour while using the device; and

(ii) a fuel tank (e.g., acetylene) may not be in the manhole unless in actual use.

(p) Microwave transmission.

(1) **Eye protection.** Employers shall insure that employees do not look into an open waveguide which is connected to an energized source of microwave radiation.

(2) **Hazardous area.** Accessible areas associated with microwave communication systems where the electromagnetic radiation level exceeds the radiation protection guide given in § 1910.97 shall be posted as described in that section. The lower half of the warning symbol shall include the following:

Radiation in this area may exceed hazard limitations and special precautions are required. Obtain specific instruction before entering.

(3) **Protective measures.** When an employee works in an area where the electromagnetic radiation exceeds the radiation protection guide, the employer shall institute measures that insure that the employee's exposure is not greater than that permitted by the radiation guide. Such measures shall include, but not be limited to those of an administrative or engineering nature or those involving personal protective equipment.

(q) Tree trimming—electrical hazards**(1) General.**

(i) Employees engaged in pruning, trimming, removing, or clearing trees from lines shall be required to consider all overhead and underground electrical power conductors to be energized with potentially fatal voltages, never to be touched (contacted) either directly or indirectly.

(ii) Employees engaged in line-clearing operations shall be instructed that:

(a) A direct contact is made when any part of the body touches or contacts an energized conductor, or other energized electrical fixture or apparatus.

(b) An indirect contact is made when any part of the body touches any object in contact with an energized electrical conductor, or other energized fixture or apparatus.

(c) An indirect contact can be made through conductive tools, tree branches, trucks, equipment, or other objects, or as a result of communications wires, cables, fences, or guy wires being accidentally energized.

(d) Electric shock will occur when an employee, by either direct or indirect contact with an energized conductor, energized tree limb, tool, equipment, or other object, provides a path for the flow of electricity to a grounded object or to the ground itself. Simultaneous contact with two energized conductors will also cause electric shock which may result in serious or fatal injury.

(iii) Before any work is performed in proximity to energized conductors, the system operator/owner of the energized conductors shall be contacted to ascertain if he knows of any hazards associated with the conductors which may not be readily apparent. This rule does not apply when operations are performed by or on behalf of, the system operator/owner.

(2) Working in proximity to electrical hazards.

(i) Employers shall ensure that a close inspection is made by the employee and by the foreman or supervisor in charge before climbing, entering, or working around any tree, to determine whether an electrical power conductor passes through the tree, or passes within reaching distance of an employee working in the tree. If any of these conditions exist either directly or indirectly, an electrical hazard shall be considered to



AT&T
Communications

P. O. Box 1418
811 Main Street
Kansas City, MO 64141
Phone (816) 391-3000

APPEARANCE OF BONN ON SENATE BILL NO. 629 BEFORE SENATE
COMMITTEE ON LABOR, INDUSTRY AND TOURISM, FEBRUARY 14, 1984

This letter and attachments is submitted on behalf of AT&T in response to proposed rulemaking concerning safety in hazardous underground work spaces as defined in the proposed Kansas Senate Bill No. 629.

The positions taken are consistent with previous inputs to both OSHA and NIOSH. The attachments on accident data and fatalities are for the Bell System, prior to divestiture on January 1, 1984 and include the most recent data available.

AT&T has long had a fundamental concern for the safety aspects of every work operation, which has resulted in an enviable safety record. The subject of safety in hazardous underground work spaces, or telecommunications manholes, is certainly of major concern to AT&T due to the magnitude of operations conducted in the manhole environment. In Kansas, AT&T has 113 underground manholes which are entered, on the average of twice a year. Nationwide, the Bell System had 700,000 manholes entered 1.5 million times annually. To ensure the effectiveness of Bell System manhole entry procedures, the Bell Telephone Laboratories has conducted exhaustive studies and tests to validate the reliability of the manhole purging and ventilation methods used by the Bell System.

AT&T is not in the business of transporting hazardous materials in telecommunications manholes. The environment encountered in the telecommunication manhole is almost always free of hazardous agents. Experience, as attested to by the low incidence of fatalities and serious injuries within the manhole, has shown that existing monitoring procedures adequately protect the employee.

A proliferation of instruments is available for testing and monitoring underground work spaces for toxics, combustibles, and oxygen deficiency on either a continuous or non-continuous basis. In the AT&T manhole, where a hazardous atmosphere rarely exists, working practices assume that all manholes are oxygen deficient and positive ventilation for a predetermined interval is mandated before entry is permitted. The cubic content of the manhole is taken into account as well as the ventilator delivery rate. The purge interval, which is based upon exhaustive laboratory tests, assures beyond any doubt an oxygen level, prior to entry that will support life. Thereafter the manhole is continuously ventilated as long as it is occupied.

Atch. 4

Prior to entry the manhole is tested for flammable gases. Those that have been detected in telecommunications manholes include gasoline, methane, and manufactured gas. These flammables can be detected by the gas indicators used by all technicians entering the manholes. Concentrations above 10% of the Lower Explosive Limit (LEL) are considered unsafe and work does not proceed until the condition is rectified.

Toxic gas testing is not routinely performed since the detection of toxic gases in telecommunications manholes is extremely rare. In those few manholes, generally found in swamp areas, where hydrogen sulfide has been detected, special tests and administrative procedures have been initiated. Telecommunications manholes, unlike many chemical storage tanks, do not have known toxic material within their confines. Therefore, it would be meaningless to test for a toxic on a routine basis where there is no reason to suspect the presence of a toxin. The purge and ventilate practices minimizes the possibility of hazard from some unlikely contaminant.

The safety procedures used in entering AT&T manholes are outlined in Bell System Practice 620-140-501 and Job Aid 26. The major elements include:

1. Erection of work area protection.
2. Testing for combustibile gases. Additional tests are required at two hour intervals.
3. Establish voice communications with the Central Office.
4. Purging to assure satisfactory oxygen level for human occupancy.
5. Continuous power ventilation thereafter as long as the manhole is occupied.

AT&T technicians who work in telecommunication manholes receive complete training on all safety aspects of the job as part of their technical training which enables them to perform the various required tasks. This training includes the use of work area protection, testing manhole atmospheres, and purging and ventilation procedures. In addition to receiving this training all of the safety requirements are reviewed annually with employees. While not specifically manhole related, all employees assigned to manhole operations are trained in an American Red Cross certified course on First Aid/CPR.

Attached to this paper are copies of three statistical summaries of Bell System lost workday injuries and illnesses associated with manhole operations covering a period of nine years. Also included is a summary of all manhole associated fatalities that have occurred from 1955 through 1983. The three summaries are not directly comparable due to substantial changes in recordkeeping methods and systems that took place during the time frame of the periods under study. The third study, covering 1976, 1977 and 1978, was performed solely by computer and should be the most accurate of the three.

While the three studies are not comparable on total number basis, there are several significant facts that are borne out by all three studies:

- The great majority of lost time accidents associated with telecommunications manholes in the Bell System are not attributable to hazards which are unique to underground work spaces, but are instead the same types of injuries that are experienced in most work environments (slips, trips, strains, lifting, abnormal bodily reactions).

- Over one-half of the lost workday injuries reported as manhole related occurred outside the manhole itself.
- The presence of an attendant or rescue equipment would not lessen the frequency or severity of the injuries encountered in Bell System manholes.

An analysis of all Bell System manhole related fatalities from 1955 to 1983 reveals further insight into the nature of potential hazards. Of the 19 fatalities, 12 occurred above the manhole (10 caused by motor vehicles crashing into the work area) and only 7 occurred in the manhole itself during the 29 year study period. Further, most of these fatalities in the manhole can be attributed to gross violation of existing practices and standards.

AT&T recognizes the potential for hazard in underground work spaces. It must be emphasized, however, that while AT&T is supportive of the legislation to provide for the safety of employees working in underground spaces, the final legislation enacted must be flexible enough to account for the different types of hazards encountered in different industries. What is necessary and appropriate for some types of underground work spaces is not needed in others. Conversely, the measures that are effective in some industries, such as telecommunications, are inadequate in other situations.

AT&T cannot support the provision for telecommunications manholes, requiring an additional employee to be routinely stationed outside the workspace to provide emergency assistance. This unnecessarily exposes the above ground employee to the hazards of vehicular traffic, increases the potential for additional injury in travel to and from the worksite, increases operating costs and encourages employees to skip certain safety measures due to the knowledge that someone is nearby to assist if something goes wrong. The decision to provide an additional person for assistance at a worksite is the responsibility of the supervisor based upon experience with the particular site and in joint consultation with the technician concerning observed hazards upon arriving at the manhole location. Generally we use the guidelines in the OSHA Standard 1910.268(o)

Further, it is the position of AT&T that the existing Federal OSHA standards (1910.268(o)), which address the specific types of underground work spaces commonly entered in telecommunications work, are appropriate for the types of hazards that are occasionally encountered in these spaces by telecommunications personnel.

Statistical Summary

Bell System Lost Workday Injuries And Illnesses*
Associated With Manhole Work Operations
1970, 1971, 1972

Exposure Hours	49,485,000
Total Lost Workday Cases	224 (See Attachment)
Cases Occurring in Manhole	100 (44.6%)
Cases Occurring Above Ground	124 (55.4%)
Incidence Rate (Lost Workday Cases Per 100 Equivalent Employees Per Year)	0.9

<u>Type Of Case</u>	<u>Number Cases</u>
Lifting Manhole Cover	53
Lifting, Pulling, Pushing, Welding - Other	71
Entering or Leaving Manhole	19
Fall From Vehicle	3
Slip, Trip, Fall - Other	12
Struck By Vehicle or Object Thrown By Vehicle	3 (1)
Struck By or Caught in Cable Pulling Apparatus	8 (1)
Struck or Struck By - Other	17 (1)
Fire, Explosion	19 (1)
Asphyxiation	1
Contacted Hot Solder, Paraffin	7
Free Bodily Motion	7
Poison Ivy, Insect Bite	3
	<hr/>
	224

*Excluding Bell Canada
(Fatalities)

Statistical Summary

Bell System Lost Workday Injuries and Illnesses*
Associated With Manhole Work Operations
1973, 1974, 1975

Exposure Hours	50,646,000
Total Lost Workday Cases	925
Cases Occurring In Manhole	439 (47.5%)
Cases Occurring Above Ground	486 (52.5%)
Incidence Rate (Lost Workday Cases Per 100 Equivalent Employees Per Year)	3.65

<u>Type of Case</u>	<u>Number Cases</u>
Lifting Manhole Cover	229
Lifting, Pulling, Pushing, Welding - Other	216
Entering or Leaving Manhole	84
Fall From Vehicle	1
Slip, Trip, Fall - Other	84
Struck By Vehicle Or Object Thrown By Vehicle	18
Struck By Or Caught In Cable Pulling Apparatus	22
Struck Or Struck By - Other	120
Fire, Explosion	19
Asphyxiation	5
Contacted Hot Solder, Paraffin	12
Free Bodily Motion	72
Poison Ivy, Insect Bites	6
Cuts From cable Sheath Or Tools	12
Dirt In Eye	5
Reaction To Plugging Compounds	5
Miscellaneous	15
	<hr/> 925

* Excluding Bell Canada

Statistical Summary

Bell System Lost Workday Injuries and Illnesses
By Types, Associated With Manhole Work Operations
1976, 1977, 1978

Exposure Hours	40,780,000
Total Lost Workday Cases	594
Cases Occurring in Manhole	294 (49.5%)
Cases Occurring Above Ground	300 (50.5%)
Incidence Rate (Lost Workday Cases Per 100 Equivalent Employees Per Year)	2.91

<u>Type of Case</u>	<u>Number Cases</u>
Struck or Struck By Object	81
Fall, Slip, Trip, Struck Against	104
Abnormal Bodily Reaction	362
Poisonous Plants, Insect/Animal Bites	5
Caught in, Under, or Between	14
Rubbed or Irritated	12
Fire, Explosion, Acoustical Shock	15
Assault, Fight, Horseplay	1
	<hr/>
	594

Statistical Summary

AT&T-Long Lines (AT&T-Communications) Occupational Injuries and Illnesses*
Associated with Manhole Work Operations
1980, 1981, 1982 & 1983

<u>Type of Case</u>	<u>Number Cases</u>	* *
Manholes - Opening, closing, pumping, testing or ventilating	10	
Work Area Protection or Flagman activity	1	

All injuries were associated with above ground activities.

* Includes Lost Workday, Restriction and Medical Treatment injuries.

** These cases occurred throughout the United States -

No occupational injuries occurred in Kansas

2/13/84

Bob Bonn

Motor Vehicle - Southern Bell - May 31, 1965

Lineman Bell System Service - 2 yrs.
Age - 25 yrs.

Drunken driver traveling at fast rate of speed cracked through manhole barricades and struck employee before crashing into parked car.

* * * * *

Electrocution - Diamond State Telephone Company, August 10, 1966

Lineman Bell System Service - 2 mos. 9 days
Electrocution Age - 20 yrs.

Employee descended into a power service manhole and contacted a primary service wire conducting 4160 volts.

* * * * *

Motor Vehicle - New Jersey - January 14, 1966

Cable Splicer Bell System Service - 3 yrs.
Multiple Injuries Age - 24 yrs.

The accident occurred on a six lane divided highway. The work area which was adequately guarded was located in the middle lane of the three south-bound lanes. A public motor vehicle traveling south in the left lane struck the employee who apparently had stepped to the side of the Company truck.

* * * * *

Motor Vehicle - Wisconsin Telephone - May 16, 1968

Cable Splicer Bell System Service - 13 yrs.
Multiple Injuries Age - 42 yrs.

Employee was struck and fatally injured by a public vehicle as he emerged from a manhole located in an intersection. The weather was stormy with intermittent rain and high winds. The driver of the public vehicle was cited for "inattentive driving."

* * * * *

Explosion - Southern Bell - December 24, 1969

Cable Splicing Foreman Bell System Service - 15 yrs.
Burns Age - 31 yrs.

Employee entered the manhole and struck a match for illumination, without testing or ventilating.

* * * * *

Motor Vehicle - Indiana Bell - July 26, 1969

Splicer Bell System Service - 15 yrs.
Age - 37 yrs.

Splicer Bell System Service - 5 yrs.
Age - 22 yrs.

Speeding vehicle crashed through protective equipment and demolished work area, fatally injuring two splicers.

* * * * *

Other - Southern Bell - Miami, Florida - February 7, 1971

Lineman Bell System Service - 7 mos.
Age - 23 yrs.

Struck by cable pulling equipment while in manhole.

* * * * *

Other - Southwestern Bell - Houston, Texas - January 6, 1972

Splicer Bell System Service - 1 yr. 6 mos.
Age - 20 yrs.

Employee shot by an unknown assailant as he was working above a manhole entrance.

* * * * *

Other - New York Telephone - Manhattan - January 17, 1972

Cable Splicing Foreman Bell System Service - 24 yrs.
Burns Age - 46 yrs.

Due to extreme cold weather it was decided to use two propane tanks in tandem to operate the heater and blower. When the second tank was being prepared, the pressure relief valve was erroneously tampered with, causing the tank to move around under the pressure of the escaping gas which became ignited from the already operating furnace. The ignited tank dropped into the manhole engulfing the foreman in flames.

* * * * *

Motor Vehicle - South Central - Chattanooga, Tenn. - January 28, 1972

Cable Splicer Bell System Service - 2 yrs.
Age - 25 yrs.

Struck by pickup truck at manhole work area.

* * * * *

Asphyxiation - Southwestern Bell - Dallas, Texas - August 14, 1973

Cable Splicer

Bell System Service - 25 yrs.
Age - 46 yrs.

A splicer died apparently as the result of exposure to an oxygen deficient atmosphere in a manhole. The employee had been equipped with high capacity ventilating equipment, but it was not in use at the time he entered the manhole.

* * * * *

Asphyxiation - Mountain Bell - Pueblo, Colorado - August 18, 1976

Cable Splicer

Bell System Service - 6 yrs.
Age - 31 yrs.

A cable splicer assigned to air pressure work died as the result of apparent oxygen deficiency while working in a manhole. A powered ventilator was at the worksite, but, for reasons unknown to the investigators, was not utilized by the deceased employee.

* * * * *

Asphyxiation - Southwestern Bell - Overland, Kansas - April 4, 1979

Cable Splicing Technician

Bell System Service - 12 yrs.
Age - 35 yrs.

A cable splicing technician died as the result of injuries suffered in a manhole on November 21, 1978. On that day, the deceased employee lost consciousness after entering a manhole that had not been tested or ventilated. A co-worker on the scene effected a rescue with the help of a passerby. The rescue was delayed while the co-worker left the scene to obtain ventilating equipment which had been left with their truck at another manhole location. The deceased employee never regained consciousness prior to his death.

MANHOLE FATALITIES
BELL SYSTEM
1980, 1981, 1982, 1983

Associated with work at a manhole site - 0

Associated with driving motor vehicles to or from work location - 2