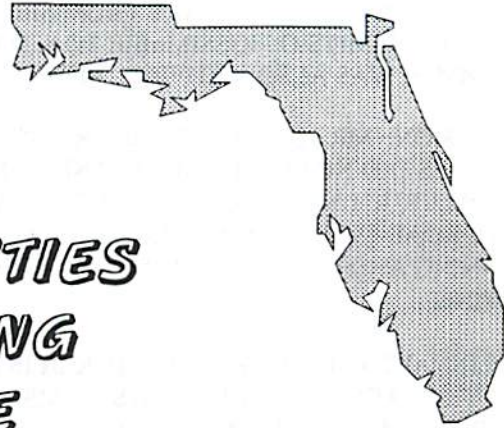


Established 1932



# FLORIDA UTILITIES COORDINATING COMMITTEE

COORDINATION THROUGH COOPERATION

MEETING MINUTES  
FEBRUARY 3, 1994  
COCOA BEACH, FLORIDA

Chairman Dave Hall called the quarterly meeting of the Florida Utilities Coordinating Committee to order at 8:30 a.m. with 111 representatives/members in attendance. Mr. Mike Sutton offered the invocation and pledge to the Flag. Chairman Hall expressed appreciation for the help and support of the following:

At Registration Desk: Ms. Arlena Dominick, Tampa Bay Engineering  
Ms. Denise Griffin, Worldwide Fiber

Sponsors for Thursday Reception: George Ingraham Inc.; Utility Consultants Inc.  
Sponsors for Coffee and Danish: Worldwide Fiber Optics

Chairman Hall called for self introductions by the officers and attendees.

Chairmen Hall introduced Mr. Joe Morgan, Mayor of Cocoa Beach. Mr. Morgan spoke about the area and available activities in the area; and he asked the group to come back to Cocoa Beach area in the future.

## SECRETARY'S REPORT - Hamid Zahir

Chairman Hall asked if there were any corrections to the minutes of the meeting held in Palm Coast on November 4, 1994. There were no corrections, and a motion was made to accept the minutes as written and wave their reading. The motion was seconded and passed.

## HISTORIAN'S REPORT -

**FIFTY YEARS AGO** - FEBRUARY 9, 1945 - ANGE BILT HOTEL, ORLANDO, A TOTAL OF 20 MEMBERS PRESENT.

OFFICERS: CHAIRMAN - R. S. DAVIS, FLORIDA POWER AND LIGHT  
VICE CHAIRMAN - HOMER WELCH, LEE COUNTY ELECTRIC COOPERATIVE  
SECRETARY - B. N. DARLINGTON, PENINSULAR TELEPHONE COMPANY

CORRESPONDENCE: ELEVEN (11) NOTICES OF INTENT TO CONSTRUCT. DURING THIS TIME PERIOD A COPY OF THE NOTICE OF INTENT TO CONSTRUCT WAS SENT TO THE F.U.C.C. LIKE WE DO NOW ON THE FDOT PERMIT. EXAMPLES:

1. FP&L TO MR. R. J. HOPPER OF INTENT TO CONSTRUCT A 66kV LINE FROM LAUDERDALE STEAM ELECTRIC STATION TO BELL GLADE SUBSTATION. THE LINE TO BE 3-PHASE, 3-WIRE #2/0 COPPER.

Chairman  
Dave Hall  
(407) 889-6813

Vice-Chairman  
Arlene Brown-McGee  
(813) 228-4674

Secretary  
Hamid Zahir  
(904) 632-6068

Historian  
Tom Duggar  
(904) 599-1543

2. LETTER TO THE SECRETARY FROM MR. LINHART OF INTENT TO CONSTRUCT A POLE LINE ON S.R. #2 FROM CITY LIMITS OF KISSIMMEE TO A POINT 1.3 MILES OUT ALONG THE HIGHWAY. THE CITY OF KISSIMMEE WAS ALSO NOTIFIED. MOST OF THE NOTICES WERE FROM FP&L.

DISCUSSION; MR. KEN WILLIAMS BROUGHT UP THE FACT THAT THE STATE ROAD DEPARTMENT OFFICIALS DID NOT GIVE AMPLE, AND IN MOST INSTANCES NO NOTICE OF INTENT TO REBUILD, WIDEN OR CONSTRUCT NEW ROADS. A MOTION WAS MADE AND PASTED THAT A LETTER BE WRITTEN TO THE STATE ROAD DEPARTMENT REQUESTING NOTIFICATION WELL ENOUGH IN ADVANCE TO PERMIT PROPER PLANNING AND COORDINATION OF WORK. THAT SUCH NOTIFICATION FROM THE DEPARTMENT BE IN WRITING.

MR. LINHART ASKED MR. SMITH IF REA IS PLANNING ANY NEW LINES AFTER THE WAR. CHAIRMAN DAVIS SAID THAT ACCORDING TO NEWS ITEMS AND TRADE JOURNALS THAT A BIG EXPANSION PROGRAM WAS PLANNED. MR. SMITH SAID THAT IT WAS DIFFICULT TO SAY AT THIS TIME, BUT REA WOULD BUILD IN RURAL AREAS WHERE OTHER POWER COMPANIES WOULD NOT BUILD. IF THE PEOPLE OF SUCH AREAS CARED FOR THE SERVICE IT WAS THEIR PLAN TO SERVE THEM, IF POSSIBLE.

MR. DAVIS ASKED MR. COLEMAN HOW IT FELT TO BE BACK AGAIN WITH THE UNDERFERD CIVILIANS AFTER GORGING HIMSELF IN THE NAVY LARDER FOR SEVERAL YEARS. MR. COLEMAN SAID HE REALLY ENJOYED BEING BACK TO WRESTLE WITH THE CURRENT PROBLEM OF THE EMCIATED 4-F'S.

**TWENTY FIVE YEARS AGO – FEBRUARY 6, 1970 – RAMADA INN, PENSACOLA**

ATTENDANCE: TELEPHONE 7, POWER 16, CITIES 3, GAS 1, DOT 6.

CHAIRMAN -- VERNE BROWN, GENERAL TELEPHONE COMPANY  
VICE CHAIRMAN -- MARION GLLIAM, FLORIDA POWER CORPORATION  
SECRETARY -- BOB CORN, FLORIDA GAS TRANS. COMPANY

NEW BUSINESS: MR. ERNEST SALLY ADVISED THE COMMITTEE THAT THE UTILITIES WOULD HAVE TO INCLUDE THEIR UTILITIES SCHEDULE OF WORK ON ALL STATE ROAD PROJECTS EFFECTIVE FOR THE FEBRUARY LETTING. HE PRESENTED THE COMMITTEE WITH A PROPOSED FORM THAT WILL BE USED IN ACQUIRING THE NECESSARY INFORMATION.

THE CHAIRMAN READ A LETTER RECEIVED BY MR. SALLEY FROM THE STATE OF ALASKA, DEPARTMENT OF HIGHWAYS, CONCERNING THE ESTABLISHMENT OF A LIAISON STRUCTURE. SPECIFIC REQUEST WAS MENTIONED FOR A COPY OF THE GREATER TAMPA UTILITY COMMITTEE'S REPORT ON SPACE ALLOCATION AND FOR INFORMATION ON ESTABLISHING DISTRICT AND LOCAL UTILITY COORDINATING COMMITTEES FUNCTIONING IN THE STATE OF FLORIDA. IT IS A PLEASURE TO SEE THAT THE EFFORTS OF THE UTILITIES AND THE GOVERNMENTAL AGENCIES OPERATING IN THE STATE OF FLORIDA ARE RECOGNIZED THROUGHOUT THE COUNTRY.

MR. GLEN COCK, STATE ACCOMMODATING GUIDE SUB-COMMITTEE CHAIRMAN, REPORTED ON THE INFORMAL MEETING HELD WITH MR. JAY W. BROWN, DIRECTOR OF ROAD OPERATIONS WITH THE FDOT, AND THE FORMAL COMMENTS RECEIVED CONCERNING THE SUB-COMMITTEE'S RECOMMENDATIONS. OTHER THAN THE ITEMS ON SAFETY SET BACKS REQUIREMENTS, THE FDOT IN MOST INSTANCES, AGREED WITH THE COMMITTEE'S RECOMMENDATIONS. A MOTION WAS MADE FROM THE FLOOR TO ADOPT THE STATE'S ACCOMMODATION GUIDE. AFTER SOME DISCUSSION CONCERNING THE SUB-COMMITTEE'S AUTHORITY ON NEGOTIATING WITH THE FDOT GIVEN BY THE WRITTEN BALLOT, THE MOTION DIED ON THE FLOOR FROM A LACK OF A SECONDED MOTION. THE SUB-COMMITTEE WILL SCHEDULE ANOTHER MEETING WITH THEIR MEMBERS TO REVIEW THE COMMENTS AND SUBMIT THEIR FINDINGS TO MR. W. BROWN.

**TREASURER'S REPORT** - Arlene Brown McGee

No written report was provided

Chairman Hall expressed appreciation for the time and participation of Mr. Paul Kaczorowski, Mr. Jimmy Laircey, and Mr. Jim Weeks in the combined interest group meeting held on February 2, 1995.

Chairman Hall called Mr. Jim Weeks, State Utility Administrator (Engineer), to present the FDOT Central Office Update.

### **FDOT CENTRAL OFFICE UPDATE:**

Jim Weeks indicated that he appreciated the inputs he received from the Utilities on the new Utility Permit Form; at the present time the FDOT is looking to find a way to formalize a flow chart in order to mechanize the flow of information between FDOT and Utilities.

- ⇒ **METRIFICATION**, Jim Weeks was disappointed that most Utilities did not know about the Metrification and the scheduling of various activities within the Metrification process. He indicated that there may be a need for a task team to look into this issue or it could be incorporated into the Borderwidth Task Team's activities. Following are the **EVENTS** and **TARGET DATES** for Metrification:

### **METRIC EVENTS**

- 1988-----PUBLIC LAW 100:418 ORDERS METRIC CONVERSION
- 1991-----EXECUTIVE ORDER 12770 DIRECTS ALL AGENCIES TO ADOPT METRIC PLAN
- 1992-----FHWA METRIC PLAN ADOPTED BY RULE
- 1994-----MANUALS/PUBLICATIONS IN METRIC
- 1996-----CONSTRUCTION (SEPTEMBER 30) PLANS SOLELY IN METRIC

### **FDOT METRIC TARGET DATES**

|                                   |       |          |
|-----------------------------------|-------|----------|
| SURVEY INTERIM PROCEDURES         | _____ | AUG., 93 |
| AASHTO STANDARDS                  | _____ | OCT., 93 |
| INTERIM METRIC DESIGN POLICY      | _____ | OCT., 93 |
| CADD METRIC MANUAL                | _____ | MAY, 94  |
| PAY ITEM DEFINITIONS              | _____ | NOV., 93 |
| TRANSITION SPECIFICATIONS (DRAFT) | _____ | JUNE, 94 |
| PLANS PREPARATION MANUAL (DRAFT)  | _____ | JUNE, 94 |
| ROADWAY STANDARD INDEXES (DRAFT)  | _____ | JULY, 94 |
| BASIS OF ESTIMATES HANDBOOK       | _____ | JULY, 94 |
| CONSTRUCTION ESTIMATING SYSTEM    | _____ | JULY, 94 |
| FIRST METRIC CONSTRUCTION         | _____ | JAN., 96 |

- ⇒ **SUNSHINE STATE ONE-CALL**, the FDOT specification's office is going to add a special provision in the bid documents to inform contractors of the One-Call requirement law.
- ⇒ **UTILITY WORK SPECIFICATIONS**, the FDOT and Utilities are working together to standardize the utility work spec.'s for Joint Project Agreements (JPA).
- ⇒ **UTILITY LOCATES**, the FDOT encourages all Utilities to perform sub-surface utility locations during the planning, designing, and construction of projects.
- ⇒ **UTILITY RELOCATION SCHEDULES**, the FDOT is working on modifying the existing Utility Relocation Schedule Forms. For instance, number of days, Maintenance Of Traffic, etc.
- ⇒ **HIGHWAY LIGHTING**, the FDOT Legal Section did not approve the Force Account option for highway lighting.
- ⇒ **ELECTRONIC COMMUNICATIONS**, electronic CADD file transfers and the Utility Permit Form are some of the issues that the FDOT is looking into.
- ⇒ **GIS**, there is a meeting in the near future to discuss the needs and requirements for the new system.

**Dennis LaBelle**, gave an update on the Borderwidth Task Team and the Transportation Research Board (TRB) activities.

- 1) University of Florida is in the process of developing a statewide pole safety program for poles that are less than 18" from the curb lines. If you are interested in joining the Task Team, please get with Dennis LaBelle. The Texas DOT in conjunction with Texas Technical Institute has done a study in suburban areas (curb & gutter); they have determined that a minimum of 10' Borderwidth will be needed.
- 2) In Washington, DC in the Borderwidth area, we are looking for additional research funds to study the recovery distance after cars hit the curb both mountable and non-mountable; curb design to redirect cars into the highway;

determine impact of Borderwidth restrictions; location criteria for increasing demand Bordrwidth areas; legal obligations to allow all users in the highway; minimum requirements for Borderwidth areas; cost effective benefits.

- 3) A national Highway conference is scheduled for October 9 & 10, 1995 in Phoenix. Topics are listed below:
- Electronic notifications for pole transfers
  - Improving working relationships between Power, Telephone, and CATV
  - Update on FCC regulations; congress is working to levelize the attachment rates which will effect joint use and attachments on utility poles
  - Impact of CATV on utility industry
  - Limiting pole heights for joint use (presentation by Dennis LaBelle)
  - Workshop on make ready coordination
  - Workshop on One Crew concept
  - Workshop on CATV design and construction efforts
  - Workshop on Joint Surveys
  - Workshop on overcrowding the joint use poles
- Also following topics will be discussed in the conference on October 11, 12, and 13, 1995:
- Resource sharing
  - Electronic permitting
  - One-Call legislation
  - Highway planning
  - Coordinating Committees
  - Joint bidding
  - Timely coordination of utility relocation
  - Value Engineering
  - Clear Zone requirements
  - Impact of NAFTA on Federal Highways
  - Workshop on Value Engineering
  - Workshop on Highway planning
  - Workshop on Electronic communications
  - Workshop on easements
  - Workshop on joint design coordination
  - Workshop on Environmental issues
  - Workshop on Highway-Utility training manual

## **P R O G R A M**

Chairman Hall Introduced the guest speaker Mr. Ken Lamm.  
Mr. Ken Lamm is with MITRE CORP.

## **I N T E L L I G E N T T R A N S P O R T A T I O N S Y S T E M S ( I T S ) A N D T H E F O R T H C O M I N G O P P O R T U N I T I E S**

# **ITS AND THE FORTHCOMING OPPORTUNITIES**

**Kenneth M. Lamm**

**21 September, 1994**

**MITRE**

# INTRODUCTION

- **Intermodal Surface Transportation Efficiency Act (ISTEA)**
  - approved in 1991
  - enabled establishment of Intelligent Vehicle Highway Systems (IVHS) program since renamed as the Intelligent Transportation System (ITS)
- **ISTEA established goals addressed in ITS program**
  - enhance capacity, efficiency, safety of highway system using alternatives to adding physical capacity
  - Increase efforts to attain air quality goals in clean air act
  - reduce societal, economic, environmental costs associated with traffic congestion

# USER SERVICES

- **29 user services identified to meet ITS goals**
- **Six “bundles” of user services, based on benefits received**
  - travel and traffic management
  - public transportation management
  - electronic payment
  - commercial vehicle operations
  - emergency management
  - advanced vehicle safety systems
- **User services implemented with advanced technologies**
  - information processing
  - communications
  - controls and electronics

# ITS PROGRESSION

- **Research and Development**
  - basic research of technologies
  - development of required devices
- **Operational Test**
  - controlled deployments for the purpose of testing promising technologies and devices
    - +TRAVTEK (Orlando, 1990)
    - +Advantage I-75
- **Deployment**
  - installation of equipment and services
    - +Initial mainstream deployment envisioned as '97-'99
    - Major metropolitan areas
    - Starting now



# ARCHITECTURE DEVELOPMENT PHASE I

- **Architecture development initiated by United States Department of Transportation (USDOT) in two phases**
- **Phase I ended in December 1994**
- **Four contractor teams each developed architectures**
  - Hughes, Rockwell, Loral and Westinghouse**
  - architecture addresses user services in 20 year planning horizon**
- **Phase I deliverables**
  - made available for purchase and public viewing**
  - availability announced in Federal Register**

## PHASE I RESULTS

- **Many ITS services are enabled by a core infrastructure**
  - **future growth for capacity**
  - **future growth for coverage area**
  - **future growth in sophistication**
    - + **surveillance**
    - + **automatic vehicle location**
    - + **traffic management/travel information centers**
    - + **electronic payment systems**
    - + **commercial vehicle clearance and safety networks**

# ARCHITECTURE DEVELOPMENT PHASE II

- **Phase II program**
  - begins February 1995, originally to end in July 1996
  - downselect chose Loral and Rockwell
  - remaining contractors will draw on information from other teams to bring the best possible solution
- **Stakeholder review and input**
  - ITS America
  - consensus task force
  - regional forums
- **A single National architecture at the end of Phase II**

# ITS PROCUREMENT

- **Not federal procurement**
  - USDOT not purchasing or implementing ITS
  - matching funds will go to state and local governments
- **ITS implementation**
  - in-vehicle electronics
  - traffic management systems (state and local)
  - fee for service functions from private providers
  - transit and commercial fleet management systems
- **Procurement of ITS**
  - individuals
  - service providers
  - state and local governments
  - transit companies and commercial vehicle owners

# DETERMINING OPPORTUNITIES IN ITS

- **Final architecture not due until July 1996**
- **Several implementations may be possible for user services**
  - cost**
  - availability of resources**
  - need for user services in a geographic area**
- **Potential opportunities can be identified now**
  - Some services may be economically implemented using wireline communications**
  - wire and cable for electric power may be required**

# POTENTIAL USE OF WIRE AND CABLE IN ITS USER SERVICES

- **Ride matching and reservation, en-route transit information, pre-trip travel information and traveller services information**
  - must be available at home, work, sites where trips originate
  - may be available from private service providers
  - will include electronic kiosks/information stations
- **En-route driver information**
  - may incorporate changeable message signs
    - +fixed locations will require power
    - +communications typically via wireline/cable

## **POTENTIAL USE OF WIRE AND CABLE IN ITS USER SERVICES (CONTINUED)**

- **Route guidance, incident management, commercial vehicle electronic clearance, commercial vehicle roadside safety inspection, HAZMAT incident notification**
  - communications from roadside to TMC, incident response center, state and local government may be required**
  - may be dedicated or interface to private carrier system or public network**

# POTENTIAL USE OF WIRE AND CABLE IN ITS USER SERVICES (CONCLUDED)

- **Traffic control and incident management**
  - **control of signals to improve traffic flow**
    - + **requires sensors and/or video surveillance (for freeways as well as arterials)**
  - **technology to give preference to emergency, transit, and HOV**
    - + **requires primarily wireline and cable for exchange of sensor/video data and signal timing commands**
- **Public travel security**
  - **Transit station and parking lot monitoring**
  - **Alarm system, video surveillance**



# **INCREASED DEMAND FOR WIRE AND CABLE FROM EXISTING PROVIDERS**

- **Many user services may be offered by private service providers**
  - **cellular radio/personal communications systems (PCS)**
  - **enhanced specialized mobile radio (ESMR) carriers**
  - **on-line computer services**
  - **Regional Bell Operating Companies (RBOCs)**
  - **interactive cable television**
- **Increased demand on communications load may require infrastructure enhancement by communications carriers**
  - **mobile radio infrastructure to connect new/additional cell sites**
  - **increased capacity for existing systems**
  - **system upgrades to accommodate new services**

# **INCREASED DEMAND FROM POTENTIAL NEW INFRASTRUCTURE**

- **Traffic surveillance and control systems**
- **Transit stop and parking lot surveillance systems**
- **Roadside communications infrastructure**
  - **beacons**
  - **radio systems**
  - **infrared communications**
- **Traveller information centers**
- **Database access**
  - **electronic toll collection and billing**
  - **commercial vehicle electronic clearance**

## **FDOT DISTRICT REPORTS:**

- **DISTRICT I,**  
No written report was provided.
- **DISTRICT II,**  
Vince Camp informed the group that the District II liaison committee meeting will be held in April, 95.
- **DISTRICT III,**  
Tom Duggar reported that the District will meet on February 24, 95 in Panama City. Soft Dig will make a presentation. Also Jerry Kelly with FDOT will talk about Tree Trimming in the Right of Way.
- **DISTRICT IV,**  
District IV continues to mail out a monthly production and letting status reports. The status report indicates an 18 month project window and show dates when the Right of Way process begins. The report is available to any utility upon request. Reported by R. DePrimo.
- **DISTRICT V,**  
District V will hold their semi-annual meeting on February 7, 1995 at the Hilton Hotel in Altamonte Springs. Guest speakers will be Mr. Jayde Roof of Florida Game and Fresh Water Game Commission, cooperation between FDOT and FGFWC for the preservation of the Florida black Bear. Fred Loose, District legal council; Jim Hamelin, construction concerns during design; Billy Hattaway, District design Engineer; Richard Taylor, District Utility Engineer will also be present.
- **DISTRICT VI,**  
Jim McGetrick reported that the next meeting will probably be in July or August in Miami. Jose Abreu is the new secretary.
- **DISTRICT VII,**  
No written report was provided. Next meeting will be on March 24, 95 in Clearwater.
- **TURNPIKE DISTRICT,**  
No written report was provided. Next meeting will be in about three weeks in West Palm Beach.

## **UTILITY NOTIFICATION CENTER REPORT:**

End of 1994; member operators-143; associate members-9

The Year 1994 totals:

|   |                 |
|---|-----------------|
| Phone calls answered _____              | 309,535         |
| Average answer speed for March _____    | 9 minutes       |
| Average answer speed for December _____ | 18.85 seconds   |
| New tickets 528,190 vs. 282,126 _____   | 87.22% increase |

Started 1994 with 18 operators and ended the year with 42 operators. Record day for 1994 was 3120 new reports; started the year 1995 with a record breaking day of 3144 new locates, then we turn around and break that record by an additional 900 on January 17, 1995 with over 4000 new locate requests.

## **INTEREST GROUP REPORTS:**

- **POWER, Terry Vogel**  
No written report was provided. The power group met on February 2, 95 with 30 in attendance.
- **TELEPHONE/TELECOMMUNICATIONS, Betsy Becker, John Jernigan**  
The group met on February 2, 95 with 41 in attendance.
  - **Old Business**  
Marilyn Pineau (Utility Consultants) gave an update on the status of coordinating joint use on customer service drops.  
Bob Mewes, told the group that the Utility Accommodation Manual is still on hold.  
Bob Mewes (GTE) brought up the Jan. 12, 95 memo from Ed Prescott of FDOT regarding the Sunshine One Call and the fact that this memo and contents was not agreed upon by the One Call representatives.

Bob Mewes (GTE) was concerned about the Asbestos subcommittee being disbanded. He doesn't feel that use of asbestos pipe by the utilities is not a settled issue.

John Jernigan (GTE) indicated that the GTE is going on line with the Georgia System for Electronic notifications for pole transfers.

Jay Gordon (BellSouth) indicated that BellSouth is on line in Pensacola and Panama City with Gulf Power and 4 or 5 CATV companies. Tickets can also be transferred by Fax so smaller companies can easily come on board the system. Jay Gordon is representing Florida for this Georgia System. There are 400 facilities using Electronic pole transfers.

Dave Bixler (MCI) gave an update on the Task force for the Department of Environmental Protection.

- **New Business**

Jay Gordon (BellSouth) wanted to bring to our attention that the EPA is going to aggressively enforce the Storm Water Discharge from manholes. They will be looking for permits and if the water has been tested for 5 items; PH reading, Oil Pollutants, Lead, and Two others.

Henry Bowlin (Sprint-United Tele.) brought up his concern that when FDOT projects, that have been stagnant for a long period of time, are started; the FDOT is not letting the utility companies update their schedules or their facilities locations; and are holding the utilities to what they specified up to 4 years ago. Also concerned that if the roadway plans change, that the utilities are not always informed of this.

- **UNDERGROUND:**

The group met on February 2, 1995 with 28 in attendance.

1. Submit permits for relocation due to FDOT construction directly to construction.
2. FDOT changing design criteria and not releasing utilities from liability.
3. ADA-requirements for MOT on sidewalks.
4. JPA pay item standardization update.

## **SUBCOMMITTEE REPORTS:**

- **CIAM/STANDARDS REVIEW,** Dennis LaBelle

- No written report was provided.

- **JOINT USE,** Bill Hetherington

1. The subcommittee met on 12/94 and 2/2/95. Finalizing the proposals for joint services to complete out investigation on joint trench.
2. Finalized proposal for cost analysis should be completed by the next FUCC meeting.

- **ONE CALL ORGANIZATION,** Dan Buol

- No written report was provided.

- **FDOT PAY ITEMS,** Carlos Solis

- No written report was provided.

- **FDOT HIGHWAY LIGHTING,** Scott Huff

- No written report was provided.

- **UTILITY NETWORKING,** Tom Kennedy

- No written report was provided.

- **MOT PLATES, HANID ZAIUR**

- No written report was provided.

- **CONFERENCE PLANNING,** Ray Afeld

- No written report was provided.

- **STRATEGIC PLANNING,** Nick Zembillas  
No written report was provided.

- **STEERING,** Arlene Brown McGee

1. Power group suggested that a letter explaining all the problems with the new FDOT permit form should be sent to the FDOT.
2. Telecommunications group indicated that the FDOT was not represented in the group meeting.
3. Underground group brought up the MOT for sidewalks and the associated problems with it.
4. CSX/FDOT subcommittee to be disbanded.
5. Department of Environmental Protection is seeking membership for a subcommittee to look at the requirements for utilities.

**The meeting locations for the year 1995/1996 will be as follows:**

|                      |       |                       |
|----------------------|-------|-----------------------|
| <b>November 1995</b> | _____ | <b>Jacksonville</b>   |
| <b>February 1996</b> | _____ | <b>Orlando</b>        |
| <b>May 1996</b>      | _____ | <b>Stewart</b>        |
| <b>August 1996</b>   | _____ | <b>Key West</b>       |
| <b>November 1996</b> | _____ | <b>Tampa Bay Area</b> |

Chairman Hall Thanked John Jernigan, Ray Afeld, Dennis LaBelle, Nick Zembillas, Dennis Black, Arlene McGee, and Hamid Zahir for their hard work and support.

Chairman Hall adjourned the meeting at 11:35 a.m.

Very truly yours,

A. Hamid Zahir, Secretary

| Quantity                                       | Unit            | FDOT Symbol       | ASTM E380         | Pay Unit | CQR |
|--|-----------------|-------------------|-------------------|----------|-----|
| Length   | millimeter      | mm                | mm                |          | MM  |
|  | centimeter      |                   | cm                | CM       | CM  |
|  | meter           | m                 | m                 | M1       | M1  |
|  | kilometer       | km                | km                | KM       | KM  |
|  | lane kilometer  | lane km           |                   | LK       | LK  |
|  | net kilometer   | net km            |                   | NK       | NK  |
|  | gross kilometer | gross km          |                   | GK       | GK  |
|  | kilometer point | kp                |                   |          |     |
| Area   | square meter    | m <sup>2</sup>    | m <sup>2</sup>    | M2       | M2  |
|  | hectare *       | ha                | ha                | HA       | HA  |
| Volume   | cubic meter     | m <sup>3</sup>    | m <sup>3</sup>    | M3       | M3  |
|  | liter           | L                 | L                 | LI       | LI  |
|  | kiloliter       | kL                |                   | KL       | KL  |
| Mass (weight<br>in the inch -<br>pound system) | milligram       | mg                | mg                |          | MGS |
|  | gram            |                   | g                 | G        | G   |
|  | kilogram        | kg                | kg                | KG       | KG  |
|  | metric ton *    | t                 | t                 | MT       | MT  |
| Density  | kg/cubic meter  | kg/m <sup>3</sup> | kg/m <sup>3</sup> |          | KG3 |
| Temperature                                    | degree Celsius  | °C                | °C                | DC       | DC  |
|  | kelvin          | K                 | K                 |          | K   |
| Time   | month *         |                   |                   | MO       | MON |
|  | day *           |                   | d                 | DA       | DAY |
|  | hour *          | h                 | h                 | HR       | HR  |
|  | minute *        | min               | min               |          | MIN |
|  | second          | s                 | s                 | SE       | SEC |
| Plane Angle                                    | radian          | rad               | rad               |          | RD  |
|  | degree *        | °                 | °                 | DG       | DG  |
|  | minute *        | '                 | '                 |          | MIN |
|  | second *        | s                 | s                 | SE       | SEC |
| Frequency                                      | hertz           | Hz                | Hz                |          | HZ  |
| Force  | newton          | N                 | N                 | N        | N   |
|  | kilogram force  | kgf               | kgf               |          | KGF |

\* indicates non-SI metric units, currently approved for use

| <sup>1</sup> Quantity     | Unit                      | FDOT Symbol         | ASTM E380           | Pay Units | QCR   |
|---------------------------|---------------------------|---------------------|---------------------|-----------|-------|
| Viscosity, dynamic        | pascal second             | Pa · s              | Pa · s              |           | PAS   |
| Viscosity, kinematic      | centistokes               |                     | m <sup>2</sup> /s   |           | M2S   |
| Pressure, Stress          | pascal                    | Pa                  | Pa                  | PZ        | PZ    |
|                           | megapascal                | MPa                 | MPa                 |           | MPA   |
|                           | bar *                     | bar                 | bar                 |           | BR    |
| Torque                    | newton-meter              | N m                 | N m                 | N1        | N1    |
| Energy, Work              | joule                     | J                   | J                   |           | J     |
|                           | kilowatthour *            | kWh                 | kWh                 |           | KWH   |
| Power, Radiant Flux       | watt                      | W                   | W                   |           | W     |
| Electric Current          | ampere                    | A                   | A                   |           | A     |
| Electric Charge, Quantity | coulomb                   | C                   | C                   |           | C     |
| Electric Potential        | volt                      | V                   | V                   |           | V     |
| Capacitance               | farad                     | F                   | F                   |           | F     |
| Electric Resistance       | ohm                       | Ω                   | Ω                   |           | OHM   |
| Electric Conductance      | siemens                   | S                   | S                   |           | S     |
| Magnetic Flux             | weber                     | Wb                  | Wb                  |           | WB    |
| Magnetic Flux Density     | tesla                     | T                   | T                   |           | T     |
| Inductance                | henry                     | H                   | H                   |           | H     |
| Luminous Intensity        | candela                   | cd                  | cd                  | CA        | CA    |
| Luminous Flux             | lumen                     | lm                  | lm                  | LN        | LN    |
| Illuminance               | lux                       | lx                  | lx                  |           | LX    |
| Speed, Velocity           | kilometer per hour        | km/h                | km/h                | KH        | KMH   |
|                           | meter per second          | m/s                 | m/s                 |           | M1S   |
|                           | knot *                    | kn                  | kn                  |           | KN    |
| Spread                    | square meter per kilogram | m <sup>2</sup> / kg | m <sup>2</sup> / kg |           | M / K |
| Rotational Frequency      | radian / second           | rad / s             | rad / s             |           | RDS   |
|                           | rev / second *            | r / s               | r / s               |           | RPS   |
|                           | rev / minute *            | r / min             | r / min             |           | RPM   |
| Activity                  | becquerel                 | Bq                  | Bq                  |           | BQ    |
| Absorbed Dose             | gray                      | Gy                  | Gy                  |           | GY    |
| Dose Equivalent           | sievert                   | Sv                  | Sv                  |           | SV    |
| Amount of Substance       | mole                      | mol                 | mol                 |           | MOL   |
|                           |                           |                     |                     |           |       |
|                           |                           |                     |                     |           |       |

<sup>1</sup> \* indicates non-SI metric units, currently approved for use  
 FDOT METRIC SYMBOL STANDARDS page 2

## Attendees at the meeting of February 3, 1995

| Name               | Company                       | Phone          |
|--------------------|-------------------------------|----------------|
| Steve Arline       | Adelphia Cable TV             | (407)-627-3600 |
| Shirleen Baker     | FDOT-Tampa                    | (813)-744-6038 |
| Danny Barrett      | AT&T                          |                |
| Chris Barrington   | PGS                           | (904)-739-1211 |
| Sue Bartlett       | Pinellas County-Highway       | (813)-464-8900 |
| Barry Beatty       | Paragon Cable                 | (813)-684-6100 |
| Betsy Becker       | Worldwide Fiber Optics        | (407)-799-4545 |
| Jackie Beebe       | City of St. Petersburg        |                |
| Nancy E. Biesinger | Ash Environmental Engineering | (813)-822-4347 |
| Dennis Black       | Paragon Cable                 | (813)-579-8600 |
| Henry Bowlin       | Sprint/United Telephone       | (407)-830-3319 |
| Paul Bowyer        | FPC                           | (813)-866-4514 |
| Michael Brady      | Utility Consultants, Inc      | (904)-748-4436 |
| Norman Briggs      | Jones Intercable, Inc         |                |
| Robert G. Brown    | Tampa Bay Engineering         | (813)-531-3505 |
| Dan Buol           | AT&T                          | (813)-299-8337 |
| Vince Camp         | FDOT - Dist II Utility Engr   | (904)-758-3732 |
| Steven Chancellor  | Bell South                    |                |
| Len Chiocca        | FP&L                          |                |
| Larry Claxon       | Tampa Bay Engineering         | (813)-531-3505 |
| Wayne Daniels      | Florida Gas Transmission      | (407)-295-4342 |
| Wayne Darden       | OUC Water                     |                |
| A. B. Dasher       | FP&L                          | (305)-347-7870 |
| Rocky DePrimo      | FDOT                          | (305)-777-4125 |
| Thomas Duggar      | Sprint/Centel                 | (904)-599-1543 |
| Charles Easterling | Orlando Utilities Comm        | (407)-384-4100 |
| Anne Endsley       | FDOT                          |                |
| Miles Epestine     | Sprint/United Telephone       | (904)-654-9457 |
| Mark Ericson       | George-Ingraham Corp          | (404)-296-0804 |
| Mike Farmer        | Peoples Gas Sys               | (813)-272-0042 |
| Richard Foster     | Southern States Utilities     | (407)-880-0058 |
| Paul G. Rivera     | George F Young Inc            | (813)-822-4317 |
| Kevin Galbreath    | Paragon Cable                 | (813)-684-6100 |
| Eduardo Garcia     | FP&L                          | (407)-694-4760 |



## FLORIDA UTILITIES COORDINATING COMMITTEE

Attendees at the meeting of February 3, 1995

| Name               | Company                   | Phone          |
|--------------------|---------------------------|----------------|
| Ken Gasaway        | Florida Gas Transmission  | (407)-295-4341 |
| Art Gilmore        | FPC                       |                |
| Jay Gordon         | Southern Bell Telephone   | (904)-350-2285 |
| Carmen Guffey      | Centel - Florida          |                |
| Larry Hammond      | Lee County Electric Co-op |                |
| Richard Harm       | Sprint/United Telephone   |                |
| William Heath      | One Number Info Systems   | (305)-721-1600 |
| James Hembree      | Palm Bay Utility Corp     | (402)-952-3410 |
| Bill Hetherington  | Lee County Electric Co-op | (813)-656-2157 |
| Ron Howell         | GTE Florida, Inc.         | (813)-893-4591 |
| Robert Hudack      | Peoples Gas System        | (813)-272-1558 |
| Willie Jackson     | Sprint/United Telephone   |                |
| Greg James         | City of Lakeland          | (813)-499-6493 |
| Robert C. Janowski | Utility Coordinator       |                |
| Ralph Jenkins      | Palm Bay Utility Corp     | (407)-952-3410 |
| John Jernigan      | GTE Florida Inc           | (813)-664-6161 |
| Bill Jones         | FPC                       |                |
| John Jones         | Sprint/United Telephone   | (904)-599-1257 |
| Richard K          | Sprint/United Telephone   | (407)-830-3428 |
| Larry Kelley       | FDOT                      |                |
| Tom Kennedy        | FPC                       |                |
| Pam Kervodle       | TVC Inc                   | (813)-371-3444 |
| John Kilkenny      | FDOT-Tampa                | (813)-744-6038 |
| Mark Locastro      | BellSouth-Daytona         | (904)-257-7931 |
| Juan Lopez         | Hillsborough County       | (813)-272-5912 |
| Burt Mapes         | AT&T                      | (305)-654-4706 |
| Regina McDaniel    | George-Ingraham Corp      | (404)-296-0804 |
| Arlene Brown McGee | TECO                      | (813)-228-4674 |
| Jim McGetrick      | FDOT District VI          | (305)-470-5231 |
| Steve McLaughlin   | Pledger Inc               | (407)-546-4848 |
| Brian McNiff       | Sprint/United Telephone   | (407)-847-1724 |
| Robert Mewes       | GTE Florida, Inc.         |                |
| Rnady Miller       | Turnpike                  | (904)-488-4671 |
| Terry Mills        | FPC                       | (813)-562-5663 |

## Attendees at the meeting of February 3, 1995

| Name                | Company                      | Phone          |
|---------------------|------------------------------|----------------|
| Keith Mutters       | Orlando Utilities            | (407)-384-4030 |
| Bill Nichols        | City of Palm Bay             | (407)-952-3439 |
| Harry Niles         | HC - Plan & Dev Mgmt Dept    |                |
| Armando Noble       | FP&L                         | (407)-495-7616 |
| Stan Nurnberger     | Gulf Power Co                | (904)-444-6096 |
| David Parham        | Enron Gas Pipeline           | (407)-875-5800 |
| Kate Pietrykowski   | Turnpike                     |                |
| Marilyn Pineau      | Utility Consultants, Inc     |                |
| Carol Primiano      | FP&L                         |                |
| N. E. "Ray" Reyburn | Pinellas Cty Land Dev/Permit | (813)-464-3670 |
| Essa Rhebi          | Okaloosa Gas                 | (904)-729-4870 |
| Ron E. Roark        | Treasure Coast Relo Coord    | (407)-337-7025 |
| GLENN SCHNEIDER     | TECO                         | (813)-228-4444 |
| Marilu Salmon       | Southern States Utilities    |                |
| Liseht Sanchez      | Southern States Utilities    | (407)-884-8777 |
| Mark Scarborough    | Gainesville Regional         | (904)-334-3400 |
| Mike Shell          | Sprint/United Telephone      |                |
| Ed Shumbera         | St Cloud Electric Utility    |                |
| Clyde Simpson       | City of Tallahassee          |                |
| Jeffrey L. Sizemore | Kissimmee Utility Authority  |                |
| J Michael Smith     | TECO                         | (813)-228-4704 |
| Carlos Solis        | Pinellas County Water Syst   |                |
| Mike Sutton         | TICS                         |                |
| Alex Sweat          | AT&T                         | (813)-951-1410 |
| Craig Terrana       | FP&L                         |                |
| Steve Tidwell       | FDOT                         |                |
| David Trafton       | Palm Bay Utility             |                |
| Dietmar O. Unger    | Turnpike                     |                |
| Ed Upchurch         | OUC                          | (407)-423-9100 |
| Jeff Vilagos        | City of Tampa-Water          | (813)-974-7097 |
| Terry Vogel         | FP&L                         |                |
| Sharon Walden       | Telesat Cablevision          | (407)-422-3961 |
| Max Wallace         | FPC                          |                |
| Lisa Watts          | Siecor                       | (407)-380-9779 |

**FLORIDA UTILITIES COORDINATING COMMITTEE**

Attendees at the meeting of February 3, 1995

| Name           | Company                         | Phone          |
|----------------|---------------------------------|----------------|
| Jim Weeks      | FDOT, Central Office-Utilities  |                |
| Brian Whaley   | Sprint/United Telephone         |                |
| Jerrold Whitt  | FDOT                            |                |
| Matt Wilson    | Allen-Medden Engineering        |                |
| Ron Worley     | FPC                             |                |
| Jim Wright     | Tampa Bay Engineering           |                |
| Hamid Zahir    | Jacksonville Electric Authority | (904)-632-6068 |
| Nick Zembillas | Tampa Bay Engineering           | (813)-531-3505 |

110

Items in this report