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March 21, 2002
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Mr. Tom Dorman
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615


Re: Petition for Confidential Treatment by Kentucky ALLTEL, Inc.
Administrative Case No. 382
Dear Mr. Dorman,
As a result of an informal conference, Commission Staff requested that Kentucky ALLTEL provide to Staff a copy of and information pertaining to the UNE model developed internally by ALLTEL Communications, Inc. ("ALLTEL"). In compliance with this request, please find enclosed an original and ten copies of a Petition for Confidential Treatment with respect to the UNE model. Attached to the Petition is one highlighted copy of the model inputs and outputs designating which portions, if not redacted, would disclose confidential material. Ten copies of the redacted version are also attached. Finally, a diskette containing the actual model is enclosed and is to be accorded the highest of proprietary treatment and is not to be duplicated or replicated in any manner.

The cost information contained in this filing is inherently proprietary in nature and public disclosure of the model, its inputs, or outputs would be very detrimental to ALLTEL and its affiliates. It is the desire of Kentucky ALLTEL that this filing be granted confidential treatment and that the diskette containing the model as well as the highlighted portions of the inputs and outputs be excluded from the Open Records requirements of the Kentucky Revised Statutes.

We appreciate your assistance in this matter.
Yours very truly,
LIEBMAN AND LIEBMAN



Counsel for Kentucky ALLTEL, Inc.
403 West Main Street
P.O. Box 478

Frankfort, Kentucky 40602-0478
Enclosures

## COMMONWEALTH OF KENTUCKY

# BEFORE THE PUBLIC SERVICE COMMISSION 

## In the Matter of:


#### Abstract

AN INQUIRY INTO THE DEVELOPMENT OF DEAVERAGED RATES FOR )

ADM. CASE NO. 382 UNBUNDLED NETWORK ELEMENTS )


## PETITION FOR CONFIDENTIAL TREATMENT

Kentucky ALLTEL, Inc. ("Kentucky ALLTEL") moves the Public Service Commission of Kentucky ("Commission") pursuant to K.R.S. §61.878(1)(c)(1) and 807 KAR 5:001, Section 7 to accord confidential treatment to the unbundled network element ("UNE") model enclosed on diskette, the associated inputs, and the attached model outputs and in support thereof states the following:

1. On February 21, 2002, representatives from Kentucky ALLTEL, Verizon South Inc. ("Verizon"), and the Commission Staff attended an informal conference to discuss the UNE prices for Kentucky ALLTEL and Verizon.
2. As a result of the informal conference, Commission Staff requested that Kentucky ALLTEL provide to Staff a copy of the ALLTEL New York UNE model with New YorkJamestown inputs, information regarding the model, model outputs, a description of how the model meets TELRIC standards, and views on the deaveraging and provision of UNE combinations policies contained in the Commission's December 18, 2001 Order.
3. The ALLTEL New York UNE model was developed internally by ALLTEL Communications, Inc. ("ALLTEL") at its own expense. ALLTEL's Cost Department devoted substantial resources to developing the UNE model, which along with the model inputs and
outputs are treated as highly confidential by ALLTEL and its affiliates. The UNE model, inputs, and outputs have not been released publicly and are disclosed internally within ALLTEL on a need-to-know basis only. The inputs and outputs of the model include ALLTEL New YorkJamestown specific data which is not relevant to Kentucky carriers and which ALLTEL New York has provided only to the New York Public Service Commission, and then only when required to do so and only pursuant to a confidentiality agreement or enforceable order according the model confidential treatment. ALLTEL and its affiliates employ all reasonable measures to protect the confidentiality of its UNE model, inputs, and outputs and to guard against inadvertent, unauthorized disclosure.
4. K.R.S. $\S 61.878(1)(\mathrm{c})(1)$ provides in pertinent part:

The following public records are excluded from the application of ...[the Open Records Act] and shall be subject to inspection only upon order of a court of competent jurisdiction ...
(c)1. ...records confidentially disclosed to an agency or required by an agency to disclosed to it, generally recognized as confidential or proprietary, which if openly disclosed would permit an unfair commercial advantage to competitors of the entity that disclosed the records.
5. Public disclosure of ALLTEL's UNE model, the inputs, or the outputs would provide other entities an unfair competitive advantage by affording them access to ALLTEL's confidential cost information and by allowing them to infringe upon ALLTEL's rights with respect to its intangible personal property in the form of the UNE model which was developed at ALLTEL's sole expense. Such models and information contained in and produced by these models are generally considered confidential and proprietary in the telecommunications industry.
6. The model, its inputs, and outputs are also protected from disclosure pursuant to K.R.S. $\S 61.878(1)(\mathrm{c})(2)(\mathrm{c})$ as a confidential and proprietary record disclosed to the Public Service Commission in conjunction with the regulation of a commercial enterprise.
7. ALLTEL and its affiliates have taken all reasonable steps to prevent the dissemination of the confidential information in the UNE model, its inputs, and outputs outside of ALLTEL, its parent corporation and affiliates.
8. Filed with this Petition is one copy of the model inputs and outputs that identifies by highlighting those portions that are confidential. Also filed are ten copies of the model inputs and outputs with the confidential information redacted.
9. Filed also with this Petition is a diskette containing the New York UNE model. Due to the highly confidential nature of the model as set forth herein, this diskette should not be duplicated under any circumstance and should be viewed only from the original diskette provided by Kentucky ALLTEL.

WHEREFORE, Kentucky ALLTEL respectfully requests that the UNE model and the highlighted inputs and outputs be accorded confidential treatment and be placed in the confidential files of the Commission, that viewing of the diskette containing the UNE model be restricted to only Commission and Staff involved in this proceeding, that no party to this proceeding including Commission Staff be permitted to duplicate the diskette containing the UNE model, and that Kentucky ALLTEL be accorded all other relief to which it may be entitled.

Dated: March 21, 2002.

Respectfully submitted,

## KENTUCKY ALLTEL, INC.



## CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Petition for Confidential Treatment and redacted model inputs and outputs were hand delivered this $21^{\text {st }}$ day of March, 2002, to the staff of the Public Service Commission as requested through an informal conference held February 21, 2002.



The model that it uses in New York with New York inputs


Information regarding the model, including a description of the model inputs and a manual for the models use


Information from the backend of the model to further describe the assumptions used


A description of how the model meets TELRIC standards


Information regarding ALLTEL's views on policies contained in the Dec. 18, 2001 Order for such items as deaveraging


## AlluE:

1. Model used in New York with New York inputs.




## NONRECURRING CHARGES

COMPANY: NY - JAMESTOWN
INITLAL COSTS

| Activity | Department | Minutes | Hourly Rate | Amount | $\begin{gathered} \text { Common } \\ \text { Cost } \\ \hline \end{gathered}$ | Initial Order | Additional Order |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

(a)
(b)

## Transport Termination

1. Record Keeping
2. Order Administration \& Billing
3. Project Management
4. Planning \& Design
5. Testing
6. Travel Time
7. Installation
8. Rearrangements
9. Disconnection
10. Transport Termination

## Service Order

1. New Service
2. Change
3. Disconnection

Maintenance

1. Basic Time
2. Overtime
3. Premium Time

## Time $\mathcal{\&}$ Material

| 1. Basic Time | COE Technician |
| :--- | :--- |
| 2. Overtime | COE Technician |
| 3. Premium Time | COE Technician |

ICSC Personnel ICSC Personnel Industry Relations Transmission Engineer COE Technician COE Technician
COE Technician
COE Technician
COE Technician

ICSC Personnel
ICSC Personnel
ICSC Personnel
COE Technician
COE Technician
COE Technician

Common Transport

1. Record Keeping
2. Order Administration \& Billing
3. Project Management
4. Planning \& Design
5. Testing
6. Travel Time
7. Installation
8. Rearrangements
9. Disconnection

ICSC Personnel
ICSC Personnel
Industry Relations
Transmission Engineer
OSP Technician
OSP Technician
OSP Technician
OSP Engineer
10. Common Transport

## Dedicated Transport

1. Record Keeping

ICSC Personnel
ICSC Personnel
Industry Relations
Transmission Engineer
OSP Technician
OSP Technician
OSP Technician
OSP Engineer
OSP Technician
9. Disconnection
-
10. Dedicated Transport
2. Order Admistration \& Billing
nagement
\& Design
5. Testing
6. Travel Time
7. Installation
8. Rearrangements -
$\square$
$\square$


| TELRIC LOOP DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL LOOP COST |  |  |  |  |  |
| Description | Source | $\begin{gathered} \text { NY - } \\ \text { Jamestown } \end{gathered}$ | Zone A | Zone B | Zone C |
| (a) | (b) | (c) | (d) | (e) | (f) |

Total Monthly Cost per Loop

| 1. | 2W Analog Loops | L6 + L11 |
| :--- | :--- | :--- |
| 2. | 4W Analog Loops | L7 + L12 |
| 3. | 2W Digital Loops | L8 + L13 |
| 4. | 4W Digital Loops | L9 + L14 |
| 5. | DS3 Digital Loops | L10 + L15 |

## Monthly Cable Cost per Loop

6. 2W Analog Loops Loop Cost WS L1
7. 4W Analog Loops Loop Cost WS L2
8. 2W Digital Loops Loop Cost WS L3
9. 4W Digital Loops Loop Cost WS L4
10. DS3 Digital Loops Loop Cost WS L5

## Monthly Electronics Cost per Loop

11. 2W Analog Loops
Electronics Allocation WS L1
12. 4W Analog Loops
Electronics Allocation WS L2
2W Digital Loops
Electronics Allocation WS L3
4W Digital Loops
Electronics Allocation WS L4
13. DS3 Digital Loops
Electronics Allocation WS L5

| TELRIC LOOP DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LOOP CABLE COSTS |  |  |  |  |  |
| Description | Source | NY - <br> Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (c) | (d) | (e) | (f) |

## Monthly Loop Cable Cost

1. 2 W Analog Loops
2. 4W Analog Loops
3. $2 W$ Digital Loops
4. 4W Digital Loops
5. DS3 Digital Loops

## 2W Analog Loops

6. Loop Aerial Cable
7. Loop U/G Cable
8. Loop Buried Cable
9. Loop Aerial Drop
10. Loop Buried Drop
11. Loop Fiber Cable

4W Analog Loops
12. Loop Aerial Cable
13. Loop U/G Cable
14. Loop Buried Cable
15. Loop Aerial Drop
16. Loop Buried Drop
17. Loop Fiber Cable 2W Digital Loops
18. Loop Aerial Cable
19. Loop U/G Cable
20. Loop Buried Cable
21. Loop Aerial Drop
22. Loop Buried Drop
23. Loop Fiber Cable

4W Digital Loops
24. Loop Aerial Cable
25. Loop U/G Cable
26. Loop Buried Cable
27. Loop Aerial Drop
28. Loop Buried Drop
29. Loop Fiber Cable

## DS3 Digital Loops

30 Loop Aerial Cable
31 Loop U/G Cable
32 Loop Buried Cable
33 Loop Aerial Drop
34 Loop Buried Drop
35 Loop Fiber Cable
Monthly Cable Cost per Foot
36. Loop Aerial Cable
37. Loop U/G Cable
38. Loop Buried Cable
39. Loop Aerial Drop
40. Loop Buried Drop
41. Loop Fiber Cable

Sum Lines 6 thru 11
Sum Lines 12 thru 17
Sum Lines 18 thru 23
Sum Lines 24 thru 29
Sum Lines 30 thru 35

Loop Cable Allocation * Line 36
Loop Cable Allocation * Line 37
Loop Cable Allocation * Line 38
Loop Cable Allocation * Line 39
Loop Cable Allocation * Line 40
Loop Cable Allocation * Line 41
Loop Cable Allocation * Line 36
Loop Cable Allocation * Line 37
Loop Cable Allocation * Line 38
Loop Cable Allocation * Line 39
Loop Cable Allocation * Line 40
Loop Cable Allocation * Line 41
Loop Cable Allocation * Line 36*2
Loop Cable Allocation * Line 37 * 2
Loop Cable Allocation * Line 38 * 2
Loop Cable Allocation * Line 39 * 2
Loop Cable Allocation * Line 40 * 2
Loop Cable Allocation * Line 41
Loop Cable Allocation * Line 36
Loop Cable Allocation * Line 37
Loop Cable Allocation * Line 38
Loop Cable Allocation * Line 39
Loop Cable Allocation * Line 40
Loop Cable Allocation * Line 41
Loop Cable Allocation * Line 36*2
Loop Cable Allocation * Line 37 * 2
Loop Cable Allocation * Line 38 * 2
Loop Cable Allocation * Line 39 * 2
Loop Cable Allocation * Line 40*2
Loop Cable Allocation * Line 41
Loop Cable WS
Loop Cable WS
Loop Cable WS
Loop Cable WS
Loop Cable WS
Loop Cable WS



| TELRIC LOOP DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LOOP CABLE FEET ALLOCATION |  |  |  |  |  |
| Description | Source | NY - Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 4W Digital Loops |  |  |  |  |  |
| 36. 4W Digital Loops Feet | Input |  |  |  |  |
| 37. Loop Aerial Cable | Line 36 * Line 8 |  |  |  |  |
| 38. Loop U/G Cable | Line 36 * Line 9 |  |  |  |  |
| 39. Loop Buried Cable | Line 36 * Line 10 |  |  |  |  |
| 40. Loop Aerial Drop | Line 36* Line 11 |  |  |  |  |
| 41. Loop Buried Drop | Line 36 * Line 12 |  |  |  |  |
| 42. Loop Fiber Cable | Line 36 * Line 13 |  |  |  |  |
| DS3 Digital Loops |  |  |  |  |  |
| 43. DS3 Digital Loops Feet | Input |  |  |  |  |
| 44. Loop Aerial Cable | Line 43 * Line 8 |  |  |  |  |
| 45. Loop U/G Cable | Line 43 * Line 9 |  |  |  |  |
| 46. Loop Buried Cable | Line 43 * Line 10 |  |  |  |  |
| 47. Loop Aerial Drop | Line 43 * Line 11 |  |  |  |  |
| 48. Loop Buried Drop | Line 43 * Line 12 |  |  |  |  |
| 49. Loop Fiber Cable | Line 43 * Line 13 |  |  |  |  |


| TELRIC LOOP DEVELOPMENT NY - JAMESTOWN |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LOOP CABLE MATERIAL WORKSHEET |  |  |  |  |  |  |  |  |
| Description | Source | Loop Aerial Cable | Loop U/G Cable | Loop Buried Cable | Loop Aerial Drop | Loop Buried Drop | Loop Fiber Cable | TOTAL |
| (a) | (b) | (c) | (d) | (e) | (1) | (g) | (h) | (i) |
| Investment Costs |  |  |  |  |  |  |  |  |
| 1. Material Costs | Selected Company WS |  |  |  |  |  |  |  |
| 2. Other Material \% | Material Input WS |  |  |  |  |  |  |  |
| 3. Total Material Costs | Line 1* $1+$ Line 2 ) |  |  |  |  |  |  |  |
| 4. Sales Tax | Line 3* 0.00\% |  |  |  |  |  |  |  |
| 5. Purchased Material Costs | Line $3+$ Line 4 |  |  |  |  |  |  |  |
| 6. Fill \% | Material Input WS |  |  |  |  |  |  |  |
| 7. Capacity Investment | Line 5 / Line 6 |  |  |  |  |  |  |  |
| 8. EF\&l Costs | EF\&I Worksheet |  |  |  |  |  |  |  |
| 9. Installed Costs | Line $7+$ Line 8 |  |  |  |  |  |  |  |
| 10. Power \& Common \% | Material lnput WS |  |  |  |  |  |  |  |
| 11. Power \& Common Costs | Line 9* Line 10 |  |  |  |  |  |  |  |
| 12. Loaded Material Investment | Line $9+$ Line 11 |  |  |  |  |  |  |  |
| 13. Utilization \% | Material Input WS |  |  |  |  |  |  |  |
| 14. Utilized Investment | Line 12 * Line 13 |  |  |  |  |  |  |  |
| Annual Costs |  |  |  |  |  |  |  |  |
| 15. Utilized Net Salvage | Salvage \% * Line 14 |  |  |  |  |  |  |  |
| 16. Depreciation Life | Economic Tables |  |  |  |  |  |  |  |
| 17. Depreciation Expense | Straight Line |  |  |  |  |  |  |  |
| 18. Depreciation Reserve | Line 14 / 2 |  |  |  |  |  |  |  |
| 19. Net Investment | Line 14-Line 18 |  |  |  |  |  |  |  |
| 20. Retum On Net Investment | L19 * RoR @ 11.25\% |  |  |  |  |  |  |  |
| 21. Income Tax | Line 20 * 59.43\% |  |  |  |  |  |  |  |
| 22. Expenses | Expense Worksheet |  |  |  |  |  |  |  |
| 23. Direct Costs | Sum Lines 17+20+21+22 |  |  |  |  |  |  |  |
| 24. Common Costs | Line 23*18.11\% |  |  |  |  |  |  |  |
| 25. Total Annual Costs | Line 23 + Line 24 |  |  |  |  |  |  |  |
| Monthly Cosis |  |  |  |  |  |  |  |  |
| 26. Return | Line 20/12 Months |  |  |  |  |  |  |  |
| 27. Depreciation | Line 17/12 Months |  |  |  |  |  |  |  |
| 28. Income Tax | Line 21 / 12 Months |  |  |  |  |  |  |  |
| 24. Expenses <br> birect Costs | Line 22 / 12 Months <br> Sum Lines $26+27+28+29$ |  |  |  |  |  |  |  |
| Common Costs | Line 24 / 12 Months |  |  |  |  |  |  |  |
| 32. Total Monthly Costs | Line 30 + Line 31 |  |  |  |  |  |  |  |
| Menthly Cost Per Foot |  |  |  |  |  |  |  |  |
| 33. Cable Pair Feet | Input |  |  |  |  |  |  |  |
| 34. Cost per Foot | Line 32 / Line 33 |  |  |  |  |  |  |  |





| TELRIC LOOP DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LOOP ELECTRONICS UNIT COST |  |  |  |  |  |
| Description | Source | NY - <br> Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (d) | (e) | (f) | (g) |

## Loop Electronics Cost per Loop per Month

1. 2 W Analog Loops Line 13 /Line $7 . / 12$ Months
2. 4W Analog Loops Line 14 / Line 8./ 12 Months
3. 2 W Digital Loops Line 15 / Line 9./ 12 Months
4. 4W Digital Loops Line $16 /$ Line $10 / 12$ Months
5. DS3 Digital Loops Line $17 /$ Line $11 / 12$ Months
6. Total Line $18 /$ Line $12 / 12$ Months

## Average Forecast Units

7. 2W Analog Loops

Demand WS
8. $4 W$ Analog Loops

Demand WS
9. 2 W Digital Loops Demand WS
10. $4 W$ Digital Loops Demand WS
11. DS3 Digital Loops

Demand WS
12. Total

Sum Lines 7. thru 11

|  |  | Loop Electronics Annual Allocated Costs |
| :--- | :--- | :--- |
|  | 2W Analog Loops | Electronics Allocation Line 1 |
| 14. | 4W Analog Loops | Electronics Allocation Line 2 |
| 15. | 2W Digital Loops | Electronics Allocation Line 3 |
| 16. | 4W Digital Loops | Electronics Allocation Line 4 |
| 17. | DS3 Digital Loops | Electronics Allocation Line 5 |
| 18. | Total | Electronics Allocation Line 6 |


| TELRIC LOOP DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LOOP ELECTRONICS ALLOCATION |  |  |  |  |  |
| Description | Source | NY - Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (c) | (d) | (e) | (f) |

Loop Electronics Annual Allocated Costs

1. 2W Analog Loops Line 7. * Line 6.
2. 4W Analog Loops Line 8. * Line 6.
3. 2W Digital Loops Line 9. * Line 6.
4. 4W Digital Loops Line $10^{*}$ Line 6.
5. DS3 Digital Loops Line 11* Line 6.
6. Total Lo
7. 2W Analog Loops Line 13 /Line 18
8. 4W Analog Loops Line 14 /Line 18

2W Digital Loops Line 15 /Line 18
4W Digital Loops Line 16 /Line 18
11. DS3 Digital Loops Line 17 /Line 18
12. Total Sum Lines 7. thru 11 Loop Electronics Line Card Costs
13. 2W Analog Loops Line 19 * Line 24
14. 4W Analog Loops Line 20 * Line 25
15. 2W Digital Loops Line 21 * Line 26
16. 4W Digital Loops Line 22 * Line 27
17. DS3 Digital Loops Line 23 * Line 28
18. Total Sum Lines 13 thru 17

Price per Electronics
19. 2W Analog Loops Price Input WS
20. 4W Analog Loops Price Input WS
21. 2W Digital Loops Price Input WS
22. 4W Digital Loops Price Input WS
23. DS3 Digital Loops Price Input WS

Forecast Units
24. 2W Analog Loops

Demand WS
25. 4W Analog Loops

Demand WS
26. 2W Digital Loops

Demand WS
Demand WS
27. 4W Digital Loops

Demand WS



| TELRIC SWITCH PORT DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MONTHLY LOOP PORT COST |  |  |  |  |  |
| Description | Source | NY - Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (d) | (e) | (f) | (g) |

## Cost per Port per Month

1. 2 W Analog Loops Line 13 /Line 7 / 12 months
2. 4 W Analog Loops Line 14 / Line $8 / 12$ months
3. 2W Digital Loops Line 15 /Line 9 / 12 months
4. 4W Digital Loops Line 16 / Line $10 / 12$ months
5. DS3 Digital Loops Line $17 /$ Line $11 / 12$ months
6. Total Line $18 /$ Line $12 / 12$ months

## Averape Forecast Units

7. 2W Analog Loops

Demand WS
8. 4W Analog Loops

Demand WS
9. 2W Digital Loops

Demand WS
10. 4W Digital Loops

Demand WS
11. DS3 Digital Loops

Demand WS
12. Total

Sum Lines 7 thru 11

## Allocated Annual Port Costs

13. 2W Analog Loops Port Allocation WS
14. 4W Analog Loops Port Allocation WS

2W Digital Loops Port Allocation WS
4W Digital Loops Port Allocation WS
17. DS3 Digital Loops Port Allocation WS
18. Total Port Allocation WS

| TELRIC SWITCH PORT DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LOOP PORT ALLOCATION |  |  |  |  |  |
| Description | Source | NY - Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (d) | (e) | (f) | (g) |


| Allocated Annual Port Costs |  |  |
| :---: | :---: | :---: |
| 1. | 2W Analog Loops | Line 7* Line 6 |
| 2. | 4W Analog Loops | Line 8 * Line 6 |
| 3. | 2W Digital Loops | Line 9*Line 6 |
| 4. | 4W Digital Loops | Line 10 * Line 6 |
| 5. | DS3 Digital Loops | Line 11* Line 6 |
| 6. | Total | Loop Port Line 25 |
| Weighted Switch Port Percentages |  |  |
| 7. | 2W Analog Loops | Line 12 / Line 17 |
|  | 4W Analog Loops | Line 13 / Line 17 |
|  | 2W Digital Loops | Line 14 / Line 17 |
| 10. | 4W Digital Loops | Line 15 / Line 17 |
|  | DS3 Digital Loops | Line 16 / Line 17 |
|  | Line Card/Port Investment | Price |
|  | 2W Analog Loops |  |
|  | 4W Analog Loops |  |
|  | 2W Digital Loops |  |
|  | 4W Digital Loops DS3 Digital Loops |  |
| 17. | Total | Sum Lines 12 thru 16 |
| Average Forecast Units |  |  |
|  | 2W Analog Loops | Demand WS |
| 19. | 4W Analog Loops | Demand WS |
| 20. | 2W Digital Loops | Demand WS |
|  | 4W Digital Loops | Demand WS |
| 22. | DS3 Digital Loops | Demand WS |








## Cost per Port per Month

1. IX Fiber Facilities OC-48 Line 15 /Line 8
2. IX Fiber Facilities OC-12 Line 16 /Line 9
3. IX Fiber Facilities OC-03 Line 17 /Line 10
4. IX Fiber Facilities DS-3 Line 18 /Line 11
5. IX Fiber Facilities DS-1 Line 19 /Line 12
6. IX Fiber Facilities DS-0 Line 20 / Line 13
7. Total Line $21 /$ Line 14

## Forecasted IX Ports

8. IX Fiber Facilities OC-48

Demand WS
9. IX Fiber Facilities OC-12

Demand WS
10. IX Fiber Facilities OC-03

Demand WS
11. IX Fiber Facilities DS-3

Demand WS
12. IX Fiber Facilities DS-1 Demand WS
13. IX Fiber Facilities DS-0 Demand WS
14. Total

Sum Lines 8 thru 13

## IX Port Annual Allocated Costs

15. IX Fiber Facilities OC-48 IX Port Allocation Line 1
16. IX Fiber Facilities OC-12 IX Port Allocation Line 2
17. IX Fiber Facilities OC-03 IX Port Allocation Line 3
18. IX Fiber Facilities DS-3 IX Port Allocation Line 5
19. IX Fiber Facilities DS-1 IX Port Allocation Line 6
20. IX Fiber Facilities DS-0 IX Port Allocation Line 7
21. Total IX Port Allocation Line 8

| TELRIC TRANSPORT TERMINATION DEVELOPMENT COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IX ELECTRONICS COST WORKSHEET |  |  |  |  |  |
| Description | Source | NY Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (c) | (d) | (e) | (f) |

## IX Port Annual Allocated Costs

1. IX Fiber Facilities OC-48
2. IX Fiber Facilities OC-12

Line 8 * Line 7
3. IX Fiber Facilities OC-03

Line 9. * Line 7
4. IX Fiber Facilities DS-3

Line 10 * Line 7
5. IX Fiber Facilities DS-1

Line 11 * Line 7
5. IX Fiber Facilities DS-1 Line 12 * Line 7
6. IX Fiber Facilities DS-0 Line 13 * Line 7
7. IX Fiber Equipment IX Port Line 25

## IX Port Weighted Percentages

8. IX Fiber Facilities $\mathrm{OC}-48$

Line 15 / Line 21
9. IX Fiber Facilities OC-12

Line 16 /Line 21
10. IX Fiber Facilities OC-03

Line 17 / Line 21
11. IX Fiber Facilities DS-3

Line 18 /Line 21
12. IX Fiber Facilities DS-1

Line 19 /Line 21
IX Fiber Facilities DS-0
Line 20 / Line 21
Total Sum Lines 8 thru 13

IX Port Electronics Cost
15. IX Fiber Facilities OC-48
16. IX Fiber Facilities $\mathrm{OC}-12$
17. IX Fiber Facilities $\mathrm{OC}-03$
18. IX Fiber Facilities DS-3
19. IX Fiber Facilities DS-1
20. IX Fiber Facilities DS-0

Sm
20. IX Fiber Facilites DS-0

Line 22 * Line 28
Line 23 * Line 29
Line $24^{*}$ Line 30
Line 25 * Line 31
Line $26^{*}$ Line 32
21. Total

Line 27 * Line 33

Price Per Port Electronics
22. IX Fiber Facilities OC-48
23. IX Fiber Facilities OC-12
24. IX Fiber Facilities OC-03
25. IX Fiber Facilities DS-3

Sum Lines 15 thru 20
26. IX Fiber Facilities DS-1

Price Input WS
27. IX Fiber Facilities DS-0

Price Input WS
Price Input WS
Price Input WS
Price Input WS

Forecasted IX Ports
28. IX Fiber Facilities OC-48

Demand WS
29. IX Fiber Facilities OC-12

Demand WS
30. IX Fiber Facilities OC-03

Demand WS
31. IX Fiber Facilities DS-3

Demand WS
32. IX Fiber Facilities DS-1

Demand WS
33. IX Fiber Facilities DS-0

Demand WS
Total
Sum Lines 28 thru 33





NOTES:

1. Expense factors gevertied from cyrrent mocounting rooorda
2. Louded miterial invertment is Line 12 on con coloneltion worksheets
3. Expense mounss equal investracat times fortor


Zone C

| LOOP and CABLE DISTANCE INFORMATION COMPANY: NY - JAMESTOWN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AVERAGE LOOP LENGTH IN FEET |  |  |  |  |  |
| Description | Source | NY - <br> Jamestown | Zone A | Zone B | Zone C |
| (a) | (b) | (c) | (d) | (e) | (f) |

Average Cable Length Allocation

| 1. | 2W Analog Loops | L13*(L14/L19)/L20 |
| :--- | :--- | :--- |
| 2. | 4W Analog Loops | L13*(L15/L19)/L21 |
| 3. | 2W Digital Loops | L13*(L16/L19)/L22 |
| 4. | 4W Digital Loops | L13*(L17/L19)/L23 |
| 5. | DS3 Digital Loops | L13*(L18/L19)/L24 |
| 6. | Total | Sum Lines 1 thru 5. |

Total Cable Length By Facility
7. Loop Aerial Pair Feet Input
8. Loop U/G Pair Feet Input
9. Loop Buried Pair Feet Input
10. Loop Aerial Drop Pair Feet Input
11. Loop Buried Drop Pair Feet Input
12. Loop Fiber Pair Feet Input
13. Total Sum Lines 7. thnu 12

Total Cable Length By Service
14. 2W Analog Loops

Line 20 * Line 26
15. 4W Analog Loops

Line 21 * Line 27
16. 2W Digital Loops
17. 4W Digital Loops

Line 22 * Line 28
Line $23^{*}$ Line 29
18. DS3 Digital Loops

Line 24 * Line 30
19. Total

Sum Lines 14 thru 18
Loops

| 20. | 2W Analog Loops | Input |
| :--- | :--- | :--- |
| 4W Analog Loops | Input |  |
| 2W Digital Loops | Input |  |
| 23. | 4W Digital Loops | Input |
| 24. | DS3 Digital Loops | Input |
| 25. | Total |  |
| Average Loop Lenpth |  |  |
| 26. | 2W Analog Loop Feet | Input |
| 27. | 4W Analog Loop Feet | Input |
| 28. | 2W Digital Loop Feet | Input |
| 29. | 4W Digital Loop Feet | Input |
| 30. | DS3 Digital Loop Feet | Input |
| 31. | Average | Average Lines 26 thru 30 |





## Alleex

2. Information regarding the model, including a description of the model inputs and a manual for the model's use. This description should include all engineering assumptions.
Total Element Long RunIncremental CostMethodology and Proceduresfor
Unbundled Network Elements and

Collocation


-atleex
Unbundel Network Element Descripition

| Rate Element | Rate Description | Billable Unit | Type of Charge | Materials Include |
| :---: | :---: | :---: | :---: | :---: |
| 1. Local Loop | Lines connecting NIDs to switch ports | Lines | RC | Aerial \& buried cable, UG cable, aerial \& buried drop, fiber cable |
| 2. Port Connection | Connects loop to switching functions | Lines | RC | \& equipment, concentrator units, and all support equipment Mainframe, line cards, protection, channel banks \& units |
| 3. End Office Switching | Process calls and access other services | Minutes | RC | Host \& remote hardware \& software, power, trunks, carrier frames |
| 4. Tandem Switching | Trunk to trunk connection between switches | Tandem Minutes | RC | \& modules, remote spans, multiplexers, call management services, generators, test equipment, and Special Software: Centrex, CLASS, etc. Dedicated and portion of shared hardware and software of 100/200 |
| 5. Interoffice Transmission Facilities | Cable connection between switches | IX Minutes | RC | digital switch <br> Fiber cable, concentrators, repeaters, or any other equipment on IX cable facility |
| 6. Network Interface Device | Connects loop facilities to inside wiring | NIDS | RC | Network Interface Devices |
| 7. Signaling Networks \& Databases | Signaling links, transfer points, and databases | Messages | RC | All hardware and software for SS7 use |
| 8. Operations Support Systems | Access to customer support systems | Messages | RC | No Costs Developed |
| 9. Operator \& Directory Assistance | Access to operators and directory assistance | Messages | RC | No Costs Developed |
| NOTES: |  |  |  |  |
| All Investment Costs <br> Recurring Costs <br> Nonrecurring Costs | Material costs, sales tax, engineering, freight, <br> Capital Costs = Direct \& Common $\cdot$ Return on <br> Expenses = Maintenance, Customer Operation <br> Time to perform work function x average load | ion, power equipment <br> ment, Depreciation, I rate \& Administrativ <br> rate of employees pe | mon equi <br> Taxes \& perating Ta <br> ing functi | ent, fill, and utilization. |

## *

## Definitions of Words Used In Document

## WOMS - Work Order Management System

WOMS was designed to automate the work order budgeting process. Outside plant materials are chosen from tables and assigned quantity amounts, the program includes unit costs and unit install hours. Once the material is selected and the quantities input the program performs the math to develop the total investment and the hours needed.

CADE - Computer Aided Design and Engineering
A facility model that provides information about the items of plant in the field. All cable facility information is loaded in the CADE system. The system provides a graphic look at outside plant facilities.

MIROR - Mechanized Inventory Record Order Reconcilliation
MIROR is the automated repository for telephone numbers, cable pairs, loop treatment and pair gain lines.
ASAP - Access Services And Provisioning
The ASAP system supports requesting, ordering, designing, provisioning, delivery, servicing and billing of access and non-access communications services. It is the repository for all special access and trunking data.

DB2 - IBM Database Warehouse
Accounting data warehouse. This is a non-production database of our accounting, billing and access information.

Access Database - Microsoft Access
A database that contains all inputs for the TELRIC model.

## Cost Model

ALLTEL's TELRIC cost development model is the basis for unbundled network element prices.
It uses investment input from separate models that develop loop, switching, and IX cable facility investment costs. Total utilized investment is determined by adding additional investment costs, sales tax, fill, Engineering, Freight, \& Installation, and Power \& Common. Additional investment costs are those materials that are used during installation of the plant. Sales tax is based on specific rates for the study area. Fill factors are based on the number of spare facilities as a percent of total facilities. EF\&I is based on current engineering studies and is the additional cost of placing plant in service. Power \& Common is based on current central office records and is the additional cost of providing power and common equipment to central office investment.

Annual costs are calculated by determining the return on investment, income taxes, depreciation expense, maintenance expense, joint expenses, and common costs. Return is based on investment, less accumulated depreciation, times a composite of authorized state and interstate rate of returns. Income tax is calculated by multiplying the return times a composite of state and interstate effective tax rates. Depreciation is calculated by using the straight-line method over the economic life of the investment. Maintenance expense is the direct cost of maintaining the investment and is calculated by multiplying utilized investment times an annual maintenance carrying charge factor. Joint expense is the ongoing cost of engineering the network, general support facilities, and property taxes, which is calculated by by multiplying utilized investment times an annual carrying charge factor for each expense. Common costs are those that cannot be attributed to any service and is calculated by multiplying total direct direct costs times a percent of common costs to total revenue. The sum of each of these costs derives total annual costs for each investment category.
For loop costs, a cost per foot is determined by dividing each type of cable's annual cost by total cable footage. The average loop length of each type of service is then multiplied by the cost per foot to determine the cost of each loop type. IX cable costs are divided by total interexchange minutes to determine the cost per minute. Total port costs are divided by working loops of the area to determine port cost per loop. Total switch costs are divided by originating and terminating minutes to determine switch costs per minute. Total tandem costs are divided by tandem minutes to determine cost per minute. Costs for each element are generated for a selected Exchange, Zone A, Zone B, Zone C, and Total Company.

## Inputs:

Loop Investment - by type of cable and exchange Switch Investment - by exchange
IX Cable Investment - by type of cable and exchange
Other Material \%, EF\&I Information, Fill Factor, Power \& Common Factor, Utilization Factor
Rate of Return, Tax Factors, Economic Life, Salvage \%
Expense Factors
Cable Length - by type of cable and exchange
Loop Length - by service and exchange
Loop and Circuit Demand - by service and exchange
Usage Demand and Growth Factors - by exchange
Termination Equipment Prices
Zone Criteria
Labor Information - by department

## Assumptions:

## Results:

Monthly Cost per:
Loop, Port, NID, End Office Switch Minute, Tandem Switch Minute, Common \& Dedicated Transport Minute

## Cable Investment

ALLTEL's Work Order Management System (WOMS) program is the basis for loop and interexchange cable investment. The program was developed by the Outside Plant Engineering Department. This Visual Basic program is designed to develop work order costs. For TELRIC purposes, WOMS is used to develop the cost of building all new exchange cable facilities by using existing network configurations and current ALLTEL Supply prices. To determine investment costs, the model multiplies current prices by the quantity of facilities needed to provide service to existing customer locations. The CABLEWIR program determines which routes have multiple cables. The program groups multiple cables by section and determines the necessary cable size to replace the multiple cables with one cable of the appropriate size.

| Comp | Exch | FromLead | FromStru | ToLead | ToStru | Size | Length | Gauge | Account | RcdCnt |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 26 | 31 | 006 N | 5 | 006 N | 6 | 600 | 546 | 24 | 14742 |  |
| 26 | 31 | 006 N | 5 | 006 N | 604 | 12 | 386 | 22 | 14742 |  |
| 26 | 31 | 006 N | 5 | 006 N | 504 | 25 | 196 | 22 | 14742 |  |
| 26 | 31 | 006 N | 5 | 006 N | 6 | 637 | 546 |  | 14742 | 3 |

In the above example, the fourth line represents the new cable. It has been sized to replace the other three cables that exist in the same space. The new record would be added to the cable data to be priced and the three other records are removed from the cable data to be priced.

Once the Cablewir.exe program has been run and the results have been netted with the initial cable data, the data is ready for the Telric Feeder program.
The program imports the cable data for one exchange.
The data is grouped by "From Lead" and "To Lead", when they match the cable lengths are summed.
The records that total " 0 " above (do not match), are then moved to results, they will not be changed
The records are then sorted by fiber and copper
The fiber records that are greater than or equal to 14 fibers are moved to results also
Two copies of the remaining records are made, one copy has its size, gauge and account changed to fiber The other copy has its cable length reduced by half
The modified data is then copied to results and is exported back to the database
The " 0 " records and the halved records become the distribution cables and the fiber is the feeder cables
Next run the DLC report. This report uses the Telric Feeder output data to determine the number of DLC's to place in each exchange. Cables are grouped by major lead, a DLC is placed every $18,000^{\prime}$ one DLC is placed. An addition DLC is placed on those routes where the end of the cable is greater than $9,000^{\prime}$ beyond the last DLC but less than $18,000^{\prime}$. All cables used in these calculations are fiber cables. The size of the DLC's is determined by dividing the number of access lines by the number of DLC's.

The resulting cable reports are input into WOMS where investment costs are determined without multiples. The Loop2 program determines the number of samples necessary for a valid study. The program chooses a list of phone numbers from all working numbers by class of service. The cable and pair data is then obtained from the MIROR program. This provides information needed to find circuits in the CADE system to determine the average cable lengths by service type. For private line services, an average length of all working circuits, by service, is used. Total cable footage by type of cable (aerial, buried, etc) is also determined. This cost can then be applied to the individual services. The investment in local fiber electronics is determined by obtaining existing equipment quantities from ASAP and the Cable \& Wire Facility data and inputting them into our model. The model calculates the investment in fiber electronics based on ALLTEL's costs. Loop costs and Interoffice Transmission Facility (IX) costs are separated based on an analysis of each cable. All IX cable costs are determined with fiber prices. Additionally, the investment in fiber electronics is determined determined by obtaining existing equipment quantities from ASAP and inputting them into our model. The model calculates the investment in fiber electronics based on ALLTEL's costs.

## Inputs:

Cable make-up (size, gauge, feet, year), manholes, conduit, and poles.
Current ALLTEL Supply cable and supporting structure prices.
Usage study results that determine loop cable facilities.
Usage study results that determine loop feeder or loop distribution facilities.
Access lines in service.

## Assumptions:

All feeder replaced with appropriate fiber cable.
All distribution replaced with appropriate size and gauge of copper cable.
All LX cables are priced with fiber prices.
Multiple cables on the same route replaced with one cable of appropriate size.

## Results:

Total loop investment by cable type for input to cost model
Total interexchange cable investment for input to cost model.

## Switching Investment

The Switching model is designed to provide the cost of installing a new switch in existing office locations within an exchange. Investment costs are based on current ALLTEL prices for the appropriate size of a digital switch. To determine switching costs the model uses vendor ordering forms as a guide. All switch data required to populate model inputs, listed below, reside in a database. Current switch size is the base to which a five-year cumulative growth factor for both access lines \& trunks is applied to determine a forward looking switch investment. Any switching equipment that is used for loop enhancement is added to loop costs. Port (line side termination), usage (switching), Tandem and Signaling are separated based on an analysis of the equipment.

## Inputs:

Existing switch types, remotes, peripheral equipment and special features.
Current vendor prices of all switch types, peripherals and special features.
Lines - equipped, installed, working.
Digital Concentrators deployed.
Onan Generator Setup and Test Units.
Rates for Engineering, Installation, Taxes and Freight
Originating and terminating minutes of use.
Interstate and Intrastate messages.
Equipment categorization study.
Access Line and Trunk growth factors.

## Assumptions:

All non-digital switches replaced with properly sized digital switches
Current host and remote switch locations remain
Prices based on current technology
CLASS features are standard on 25 percent of working lines.
A Business Management Computer (BMC) provisioned on all host or HSO switches.
Onan generators are standard on all ESA switch locations.
Standard Test Equipment provisioned at all locations.
ISDN BRI is standard
All concentrators are digital AccessNodes.
Line growth is five years cumulative, based on line forecasts.
Trunk growth is five years cumulative, based on the ALLTEL regional Trunk Forecast.
Trunk capacity based on engineering projections.
NID installation is standardized at one half ( $1 / 2$ ) hour labor.
Switch MOU is comprised of Toll, Eas \& Local Mou for all switches in the study.
Tandem MOU includes MOUs of all switches that utilize the tandem

## Results:

Total switching investment for input to cost model.

(

## rmine Exchange Locations:

to I:\EconCosts\DatalCostdatalExchange.mdb
Run the report "Exchange Listing By Host" to determine existing switch locations by Exchange.

## Growth Rates:

Contact the Regional Traffic Engineering group and the Marketing Network Services group for the study area and request the most current Trunk Forecast and Access Line Forecast for the study exchanges.
Go to I:LEconCosts\Telric\COE\Forcast.mdb
Input the current year and five years forward trunking and access line counts.

## Equipped Line Counts:

Download the Equipped Line counts from MIROR and populate Exchange.mdb

Concentrator quantities:
Obtain a copy of the "Report of Concentrators by Exchange and Size" which is produced in I:\EconCosts\Data\CostdatalTelric_Cable.mdb

## DTC/DTCI Trunking:

Go to I:VEconCosts\Telric\COELMisc Switching Data.mdb to obtain the number of Toll, EAS \& Local trunks in each exchange.

## Prepare Switch Model Inputs:

Go to I: $:$ EconCosts $\backslash$ Telric\COE\xx2000.xls Do a Save As and rename the file for the current study area.to the DTC Trunks tab and modify it for the current study exchanges, then populate it with DTC/DTCI Trunking data, actual remotes xchange, and number of AccessNodes from the Report of Concentrators by Exchange and Size report.

Go to the Lines tab, press the Update Data button to run a macro to import Equipped Lines and Card Type Percentages from the Misc Switching Data.mdb LNP Software investment is automatically calculated.

Go to the Switch Inputs tab and modify it for the current study Host \& Remote switches. All pertinent switching data is entered here by exchange: the number of remotes, the number of AccessNodes, office type (Host, Remote, Standalone), line \& trunk growth rates, wired line count (equals equipped lines), DTCs, DTCIs, DS1 I/F cards, LTCs and their DS1 I/F cards, SMAs and their DS1 I/F cards, along with picks for SS7, LPP/CCS7, BMC, ACD, CLASS, MDC, Switch 56, Switch 64, IDSN capability, Test and power equipment. This information will be used to run the ACCESS Switch Model.

## Switch Model:

Go to I:\EconCosts\Telric\COE\Switch Model.mdb Data Input form.
Pick the Company Name and Exchange Name then key the Switch Type.
Populate all Switch Model tabs for each switch using information from the Switch Inputs tab of $\mathrm{xx} 2000 . \mathrm{xls}$
When all tabs are populated for every switch in the study area, go to queries and run:
Q2 - Make_Total_Table
Q3 - Make_Concentrator_Table
Q4 - Make Table "Switching Results"
Go to Reports and run the Switch Cost By Exchange report.
o I:\EconCosts\Telric\COE\xx2000.xls
Go to tab xx Input adj's

From the Switch Cost by Exchange Report - page 2 - Switch Elements Detail, transfer each exchanges Switch Port Material to Switch Port Switching (column B). Then transfer each exchanges Switch - Usage Material to End Office Switching (column F.)

## AccessNode Investment (Concentrators):

II:\EconCosts\Telric\COE\xxnodes.xls Do a Save As and rename the file for the current study area.
Modify the tabs in xxnodes.xls for the exchanges in the current study area. Using the "Concentrator Listing by Exchange" report (See Concentrator quantities) populate the various exchange tabs with the number of concentrators and Equipped Lines. Pick the \# of CDS (for POTS Lines) or \# of UE (for UE900 lines) needed for each exchange. Results directly link to the Total xx AccessNodes tab.

Copy the Line Card Investment \$ times the number of concentrators to Concentrator Line Card \$ (Column C) of I:\EconCosts\Telric\COE\xxnodes.xls

## ELEMENT COST feeder Database Input:

Go to I:\EconCosts\DatalCostdatalExchange.mdb
Go to Forms

## Open UNE/BNF Input Forms

Transfer data from the Switching Results table in I:\EconCosts\Telric\COE\Switch Model.mdb to the UNE/BNF Input Forms for each exchange.

Transfer adjusted Concentrators investment from I:\EconCosts\Telric\COE\xxnodes.xls\Total $x x$ AccessNodes tab to the UNE/BNF Input Forms for each exchange.
frnsfer LNP Software investment from I:\EconCosts\Telric\COE\xx2000.xls Lines tab to the UNE/BNF Input Forms for each exchange.

Transfer the adjusted Switch Port Switching and adjusted End Office Switching from I:\EconCosts\Telric\COE\xx2000.xls xx Input adj's tab to the UNE/BNF Input Forms for each exchange.

Transfer type A, B, C, D \& ISDN Line Card Investment from I: C EconCosts $\backslash$ TelriclCOE\xx2000.xls Lines tab to the UNE/BNF Input Forms for each exchange.

## - \& LLEEL <br> TELRIC Procedures

## Cable \& Wire TELRIC Study

1. Exchange numbers used in the study are determined
2. OSP data is downloaded from CADE and entered in Access database
3. Preliminary queries are run to cleanup cable types and sizes for input to WOMS
4. Two Cable \& Wire programs are run and saved
5. Sorting \& subtotaling is performed on results of Cable \& Wire files and input to WOMS
6. IX maps are developed for each exchange with cables and footage's by using I/O maps as a guide,
7. Results are sorted and subtotaled then input to WOMS.
8. IX Electronics are determined by using various ASAP reports then input to Access database.
9. Access Lines are used to calculate Drop Wire amounts and input to WOMS
10. WOMS output includes loop investment, IX investment, drop wire investment and install hours for each piece. Results are entered in Access database.
11. Private line data, including circuit length, is downloaded from ASAP.
12. POTS data, including phone number, is downloaded from DB2.
13. The loop and circuit sample size is determined by using a random sample program in Excel.
14. Private line circuit lengths are averaged by type of circuit and input to Access database.
15. Determine the POTS circuit cable, cable pair and terminal information by using MIROR .
16. Determine the cable makeup and length by looking up circuits in CADE.
17. Average the pots circuit lengths and input into Access database.
18. Results are input to Access database for use by cost model.

## Central Office Equipment TELRIC Study

1. Determine current Host \& Remote switch placements for the Exchange using Engineering information.
2. Calculate growth rates for Access Lines \& Trunks using the most current issue of the line and trunk forecasts. This is used to develop a five year forward looking cumulative growth rate.
3. Obtain working \& equipped line cards by Exchange from MIROR. This reflects current Access line data by line card type.
4. Access database is populated with MIROR data line card data.
5. Switch link data is obtained by location from ASAP.
6. DTC Trunks are entered in Excel file with trunking, remotes and concentrator quantities.

This file determines the number of DTC/DTCI, LGC, SMA and SMC controllers and I/F cards needed to populate the ALLTEL Switch Model.
7. Switch Model Input Sheets are populated with Line Card Information, line and trunk growth rates, trunk controllers, I/F card quantities, and any other features specific to each switch in the network.
8. Switch Model is run for each switch in the Exchange using the Switch Model Input Sheets.

This model uses ALLTEL specific NORTEL pricing to completely cost the switches at today's prices and the most current generic software release.
9. Minutes of Use are obtained from the latest available Traffic Study.
10. Messages are obtained from the CABS Access database file.
11. Results are input to database for use by cost model.

## - FiwLLEE <br> TELRIC Cable \& Wire Facilities Cost Development

Infomaker (downloads embedded copper and fiber cable records from CAD-E)

Access (imports downloaded data into access)
Import Data
I: $\backslash$ Econ Costs $\backslash$ Data $\backslash$ Cost Data OSPCPR.mdb
File - Get External Data $\square$ Import
Change file type to "Text"
Click on "Import"
Click on "Advanced"
Click on "Specs"
If importing copper file $\square$ choose "Copper Import Specifications" If importing fiber file $\square$ choose "Fiber Import Specifications"
Click "Okay"
Click "Finish"
Append Data
I:\Econ Costs $\backslash$ Datal Cost Data\ OSPCPR.mdb

Queries: "Append Import Data" $\square$ Design
(Appending to CAD-E Raw Data Table
Be sure query type is "Append"
Right click on existing table $\square$ choose "Remove Table"
In "Field" row change Company \# and Exchange \# as needed
Right click in gray area at top $\square$ choose "Show Table"
Pick current exchange
Double click in header to highlight all fields, then drag to
"Company" field
Append Query is now ready to run $\square$ choose (!) to run it
Run 3 Queries

1) ***Make Table - Backup of CADE Download-Raw" data

You can't just run this. Go into design view, put company number on Criteria line. Click on Query type - name table to
2) $\mathrm{Al}_{1} 1$ Make Table - Make CAD-E data numeric

Check Cable_Main. If current company data is there, delete it prior to running query A1_2
3) Al_2 Append CAD-E data to Cable_Main

Run Cablewir.exe Program

## Open OSPCPR.mdb

Forms: Main Menu
Click button for "Remove Data from Cable_Table and appends new exchange data"
Input Exchange Number
Minimize screen

Open Cablewir.exe Program
Click on each report (Aerial, Buried \& Underground) and run for each exchange. To run reports $\square$ Input company \# and exchange \#, then click on "Search" twice. When search is complete choose "Save as" to I:\Econ Costs\Worksheets $\backslash$
Cablel "state" $\backslash \$ \# \# * * * *$

$$
\begin{aligned}
& \$=\text { Type }-\mathrm{A}(\text { aerial }), \mathrm{B} \text { (Buried) or } \mathrm{U}(\text { Underground }) \\
& \# \# \#=\text { Company \# }(158=\text { Ohio }) \\
& * * * *=\text { Exchange \# }
\end{aligned}
$$

Change file type to "Excel with headers"
After 3 reports are run for current exchange go back to Cablewir.exe Program and proceed with next exchange.

After Cablewir.exe program is completed for all exchanges and types, roll all aerial excel files into 1 aerial excel file and all buried excel files into 1 buried excel file and all underground excel files into 1 underground excel file. Results will be all aerial data will be in one aerial file and same for buried and underground.

Once you have completed running the Cablewir.exe program on all exchanges and have summarized the results by "Aeria
WOMS Cable Update.mdb in the "WorksheetslCable" directory.
Import the Aerial, Buried and Underground Excel files into Access by the following steps: Query - "Delete Data in Detail Table"

File $\square$ Get External Data $\square$ Import
Change file type to Excel
Choose filename (\#\#\#Aerial, \#\#\#Buried, \#\#\#Underground)
Choose Import
Check box for "First Row as Heading"
Click Finish
Repeat for each file.

Next, you will append these files to the Detail file by the following steps:
Queries $\square$ New $\square$ Design View
Choose first file (\#\#\#Aerial)
Click on "Add" then "Close"
In heading area of table double click to select all fields
Hold down mouse button and drag to first column below
Change Query type to "Append"
Choose "Detail" as table to append to
Append the fields as follows:

| Extcompany | to | Company |
| :--- | :--- | :--- |
| Extexchange | to | Exchange |
| Extlead | to | FromLead |
| Extfrom | to | FromStructure |
| Extto | to | ToStructure |
| Extcablesize | to | Size |
| Extcablelength | to | Length |


| Extcablegauge |  | to |  | Gauge |
| :--- | :---: | :---: | :---: | :---: |
| Extaccountnumber | to |  | Account |  |
| Extrec_cnt |  | to |  | RecordCount |
| Extsumlength | skip |  |  |  |
| Exttolead |  | to |  | ToLead |

Run Query

Repeat for each file (\#\#\#Buried, \#\#\#Underground)

WOMS_Cable_Update.mdb

Forms:
"Correct cable sizes over 3000 pair"

1. Update table data
2. Choose an exchange
3. Run cable update (ignore error msgs)
4. Append to Summary (After this is done, you will see exchange twice, once with name to right of exchange number.

Queries:
A1_1 Remove data from Cable Input Table
A1_2 Copy data from Cable Main to Cable Input
Al_3 Make Table - Combined Detail/Summary/Cable Input
A1_4 Append Detail data to Combined table
A1_5 Append Summary data to Combined table
A1_6 Update missing cable gauge
A1_7 Remove data from Cable_Main_Telric table
A1_8 Append Combined to Cable_Main_Telric table

Verify Access Lines are entered in Interexchange.mdb for current company!
If they are go on to "Ready to Run Feeder Program". If they are not then

Retrieve Access Lines

DOA Reports for the necessary exchanges are run overnight in MIROR

Download DOA reports from MIROR

Copy the text file to the appropriate directory under I:UEconomic Costs 1 Worksheets $\ M I R O R$.

Open "Editmirr.xls" spreadsheet. This spreadsheet will summarize and format the text data for import into the database.

Import the saved excel spreadsheet into the I:\Economic Costs\datalcostdatalMiror Data.mdb database.

Run query "0 - Empty Download Data Table"
Append the data into the Miror Download table.

Run queries $\mathbf{1 - 2}$. If query 2 returns errors you must go to the Exchange database and make any corrections or additions necessary.

This information is input to:
$\mathrm{I}: \backslash$ Economic Costs $\backslash$ Worksheet $\backslash$ Cablel Interexchange.mdb
Forms: Input Access Lines

## Ready to Run "Feeder Program"

## Telric_Cable.mdb

Forms: Main Menu
"Update New Company"
"Change Exchange Data"
"Run Feeder Program"
"Import Data" - This imports data into "Cable_Results"

## Determine number of DLCs

After all exchanges are imported, select "Preview DLC Report", This produces the "Concentrator Listing by Exchange" report ("Report of Concentrators by Exchange and Size"). Print and give to Jim F.

## Summarize Feeder Output

Woms_Cable_Update.mdb

Run Queries

1. ES1_0 Purge data in Summary table.
2. ES1_0_1 Make Table Grow Cable Sizes 0\% (Grown Cable Results)
3. ES1_0_2 Append Fiber to Grown Cable Results
4. ES1_0_3 Append Grown Cable Results to Summary
5. ES1_1 Update Summary Cable sizes (1-400)
6. ES1_2 Update Summary Cable sizes (401-3000)
7. ES1_3_1 Populate Gauge Field $<=1200$
8. ESI_3_2 Populate Gauge Field $>1200$
9. ES1_4 Sort Exchange Summary - Makes Test WOMS Cable
10. ES2_1 Sort Cable for WOMS Input - Update Inplace Codes - 1
11. ES2_2 Sort Cable for WOMS Input - Update Inplace Codes - 2
12. ES2_3 Sort Cable for WOMS Input - Update Inplace Codes - 3
13. ES2_4 Sort Cable for WOMS Input - Update Inplace Codes - 4
14. ES2_5 Sort Cable for WOMS Input - Update Inplace Codes - 5
15. ES2_6 Sort Cable for WOMS Input - Update Inplace Codes - 6
16. ES2_7 Sort Cable for WOMS Input - Update Inplace Codes - 7
17. ES2_8 Sort Cable for WOMS Input - Update Inplace Codes - 8
18. ES2_9_1 Sort Cable for WOMS Input - Update Inplace Codes - 9
19. ES2_9_2 Sort Cable for WOMS Input - Update Inplace Codes - 10

Skip ES3_1
20. ES3_2 WOMS Exchange Summary Input Data - Make Table
21. ES3_3 Test WOMS Exchange Summary Input Table

Print the output of Query ES3_3. These are the codes that need to be changed to match what is in the "Inplace" Table. Loc
Update Codes in "Summary" table by these steps:

1. Queries: New, Design View
2. Remove Existing Table, if necessary
3. Show Table: Summary

Pick fields from box -
Size, Gauge \& Account - Drag into bottom area
4. On "Criteria" row enter first item info to be changed

Ex: BFC 12-19 (BFC = 14742 copper, 14746 fiber)
Size: Gauge: Account:
Criteria
1219
14742

Be sure query is a "select" query and run. (!)

This will now list the record that contain "BFC12-19" and need To be changed to the proper code found in the Inplace table.

From here click on "Design View" (upper left comer).
Change query type to "Update Query"

On "Update To" line make necessary changes and run again.
A prompt will tell you how many records are being updated. This number should match the number in your select query above.

Continue until all codes are corrected.

Now go back to queries and rerun beginning with ES1_4 and Continuing through ES3_3 (again, skip ES3_1.)

Continue the process until Query ES3_3 "Test WOMS Exchange Summary Input Table" produces no incorrect codes.
Query: "Delete All Data in Detail Table"

Go To: Interexchange.mdb and run queries 1 thru 9-3.
(First check to see if they have already been run)

Go back to WOMS Cable Update.mdb

Queries:
EC1_1 - Make table - WOMS Combined from Detail data
EC1_2 - Append IX data to WOMS Combined
EC1_3 - Append Summary data to WOMS Combined
ECl_4 - Make "Item" field 8 char.
ECl_5 - Delete data in WOMS Combined Exchange table
EC1_6 - WOMS Combined Exchange table - Append
EC1_7-Make "Item" field 8 char.

Move Data to WOMS

Open WOMS97.mdb
Open Budline table and delete all data for current company.

Run Query "Append Interexchange Cables by Exchange to Budline."

Run Query "Append WOMS Combined Exchange Table to Budline."

Delete all data in "Drop Wire" Table.

Run Query "Test Query - Drop."

Go to Repo WOMS Summary Report
Select Preview and enter Co. \#, dash, . (026-*) Print this report.

Go to Tables: Open "Drop Wire"
On the report you printed there is a heading in the middle of the page called "Drop Wire Inputs". There are two numbers 026-0313 in Drop Wire table would be 026-0311 Loop or 026-0312-IX in the report. Once the Drop Wire table is populat

## Run WOMS Summary Reports again.

The reports are then input into the UNE/BNF Input forms in the Exchange.mdb database.
Run query "Budline Without Matching test Cable Totals"
Any cables that are in results must be added to "Test Cable Totals" table.

## Run Report "UNE Input of Total Cable Footages"

Item code format: \#\#\#-* (3 digit company \# plus dash plus *)
Input data from this report to Tables in database
Exchange.mdb
UNE/BNF Input Form
Usage \& Feet Tab
Loop Aerial Pair Feet and
Exchange Square Miles

Run Report "Access Lines \& NIDS by Exchange"
Input data from this report to Tables in database:
Exchange.mdb
UNE/BNF Input Form
Retrieving Trunk and Facility data from ASAP

1. To Get Exchange List Sheet
I:Economic Costs Data CostDatal Exchange.mdbRun report: "Exchange Listing - for running Telric Reports"
2. Open ASAP
Desktop Icon: "NE_View" or "SW_View" ..... Or
I:\ General $\backslash$ Sep $\backslash$ ASAP $\backslash$ Cost $\backslash$ SW_View.exe NE_View.exe
3. Click on "Reports" (upper left corner)Choose proper reports:"Channel_Usage_by_Exchange_Telric""Facility_Counts_by_Exchange_Telric""H_C_by_Exchange_Telric"
Input CLLI code from listing and after report runs, print it
Also, print the "H/R LINKS BY OPERATING COMPANY NUMBER" report
This information is input to:
I:\Economic Costs \Worksheet \able\ Interexchange.mdb
Forms: Input Electronics
Retrieving Private Line Loops and Length data from ASAP
Click on "Queries"
Choose proper query:
q_cable_length_2
query_specials_by_company
Run and save results to I:\Econ Cost $\backslash$ Worksheets $\backslash$ Loop $\backslash$ (company name)
Open ASAPDATA.mdb (I:\Econ Cost $\backslash$ Worksheets $\backslash$ Loop)
Import results of "q_cable_length_2"
Build a Summary Query
Run "Make Table..." Query
Open "LOOPSTUDY" mdb (I:LEcon Cost $\backslash$ Worksheets Loop)

## Run Queries:

1. 1_Delete Data in Ploops Table
2. Delete Entries in Download Table
3. Append Imported Data into Download Table
4. 2 Sort Private Lines A
5. 3_Sort Private Lines Z
6.3_1 Update 2_Wire digital to 4_Wire
6. 4_Update OC3 to DS3
7. 5_Update DS4 to DS3
9.6_Update Local PL Loops
10.6_1 Update IX PL Loops
8. A_4 Append PL Loop Data to Loop Summary by Exchange
9. Private Lines with Length's
Save query results to Excel, average data by service type. Average all DS0 circuit lengths.
This information is input to:
I: \Economic Costs $\backslash$ Worksheet $\backslash$ Cable\ Interexchange.mdb
Forms: Input Electronics
Run "Loop Summary Table Report by Exchange"
This information is input to:
I: \Economic Costs\Worksheet Cable\Interexchange.mdbForms: Input Electronics
Retrieve Link data from Switching
Open "co"2000 \DTC Trunks
Pull Host Remote and DTC Links by Exchange
This information is input to:
I: \Economic Costs\Worksheet Cable\ Interexchange.mdb
Forms: Input Electronics
Run "Summarize Electronic Data" Report (I:IEcon Cost \Worksheet\Cable\ Interexchange.mdb)
Enter this data into Exchange.mdb
$\square$ UNE/BNF Input Forms
Retrieve Interexchange Miles
Run Query 9-51 (I:\Econ Cost \Worksheet\Cable\ Interexchange.mdb)
