## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

 ADDITIONAL SUPPLEMENTAL DIRECT TESTIMONYOF<br>STEVEN M. MCMAHON

## ORIGINAL

Q. Please state your name and business address.
A. My name is Steven M. McMahon. I am employed by Sprint/United Management Company as Senior ManagerNetwork Costing. My business address is 6360 Sprint Parkway, Overland Park, Kansas 66251.
Q. Are You the same Steven M. McMahon that presented prior direct and supplemental direct testimony in this case?
A. Yes, I am.
Q. What is the purpose of your additional supplemental direct testimony?
A. The purpose of my additional supplemental direct testimony is to introduce and support Exhibits SMM-6 through SMM-13. While there are 24 NRCs that are DOCUMENT NUMBER-DATE
being changed, there are a smaller, common set of reasons underlying the revisions.

Sprint's original UNE NRC cost model was used as a basis for creating the new UNE NRCs required per the Remand Order. It was realized shortly after Sprint's filing on May 12, 2000 - which revised a single NRC (involving Loop Pre-Qualification), that the original UNE NRC cost model was lacking entries for certain engineering functions associated with digital loops. The proper inclusion of work times corresponding to these engineering functions is the single reason behind 18 of the 24 NRC revisions.

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Q. Are there other reasons underlying the other six (6)
        NRC revisions?
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A. Yes. It was discovered that the NRC model was referencing an incorrect cell for labor rates on three
(3) of the NRCs.
Q. Are there other reasons underlying the other three (3)
NRC revisions?
A. Yes. The other three (3) NRC revisions involve the removal of charges that should not have been included in the original filing. It was determined that the "CT, DCOP, Migrate" NRC, does not apply to digital data services. These services are removed in their entirety upon receipt of a disconnect order. When end-user customers want to change digital data service providers, Sprint builds and tests an entire new data facility from the end-user location to the new service provider point of interconnection. This ensures that end-user customers will experience minimal outage time for their mission-critical data applications when switching service providers.
Q. Did you prepare a schedule that summarizes the effect of these changes?
A. Yes. Exhibit $S M M-6$ is a summary of Non-Recurring Charge (NRC) UNE cost study revisions being filed with this additional supplemental direct testimony. This schedule lists the elements being revised, the old NRC, the new NRC, the difference and the reason(s) for revision.

## 11 Q. Does this conclude your supplemental testimony?

The changes summarized on Exhibit SMM-6 are also reflected on Pages 1-3 in the NRC Results Summary section of the NRC cost study found under the "NRC" tab of Volume III. These updated pages are labeled as Exhibit SMM-7.

Exhibits SMM-8 through SMM-13 are the corresponding revised pages of the $N R C$ study that reflect the detail and calculations of the changes outlined herein.Exhibits SMM-8 through SMM-13 are the
revised pages of the NRC study that r
and calculations of the changes outli

13 Does this conclude your
$\square$

UNE NRC Revision Summary

|  |  | Old |  | New |  | Diff | Reason for Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Installation Charges |  | NRC |  | NRC |  |  |
| Item |  |  |  |  |  |  |  |
| 1 | 4-Wire New - Addt'l Line | \$ | 48.42 | \$ | 44.78 | S (3.64) | Incorrect cell reference for labor rate. |
| 2 | 4 Wire Re-install (CT/DCOP/Migrate) | s | 25.90 | \$ | 21.52 | \$ (4.38) | Incorrect cell reference for labor rate. |
| 3 | 2-Wire ISDN, BRI-IDSL Loop, First Line | 5 | 107.11 | s | 120.57 | 13.46 | Added 2 min for Facil. Coordinator and 20 min for OSP Eng. |
| 4 | 2-Wire ISDN, BRI-IDSL Loop, Addt'l Line | \$ | 59.47 | s | 72.93 | \$ 13.46 | Added 2 min for Facil. Coordinator and 20 min for OSP Eng. |
| 5 | 2-Wire ISDN, BRI-IDSL Loop, Re-install (CT, DCOP,Migrate) | s | 22.65 | s | 22.36 | S (0.29) | Incorrect cell reference for labor rate. |
| 6 | 56, 64kbps Loop - First Line | \$ | 121.68 | \$ | 171.41 | \$ 49.73 | Added 2 min for Facil. Coordinator, 20 min for OSP Eng., 30 minutes for ASR Eng, increased testing from 15 to 32 minutes. |
| 7 | 56, 64 kbps Loop - Additional or Second Line | \$ | 73.17 | \$ | 122.90 | \$ 49.73 | Added 2 min for Facil. Coordinator, 20 min for OSP Eng., 30 minutes for ASR Eng, increased testing from 15 to 32 minutes. |
| 8 | 56, 64 kbps Loop - Re-install (CT, DCOP, Migrate) | \$ | 27.40 | \$ | - | \$ (27.40) | Deleted NRC |
| 9 | DS1, ISDN-PRI Loop - First Line | \$ | 121.68 | \$ | 194.38 | \$ 72.70 | Added 15 min for Facil. Coordinator, 20 min for OSP Eng., 30 minutes for ASR Eng, increased testing from 15 to 51 minutes. |
| 10 | DS1, ISDN-PRI Loop - Additional or Second Line | \$ | 73.17 | \$ | 145.87 | \$ 72.70 | Added 15 min for Facil. Coordinator, 20 min for OSP Eng., 30 minutes for ASR Eng, increased testing from 15 to 51 minutes. |
| 11 | DS1, ISDN-PRI Loop - Re-install (CT, DCOP,Migrate) | \$ | 27.40 | s | . | \$ $(27.40)$ | Deleted NRC |
| UNE Combinations |  |  |  |  |  |  |  |
| Enhanced Extended Link (EEL 1); DS0 Loop, 1/0 Mux, DS1 Transport |  |  |  |  |  |  |  |
| 12 | EEL 1 - 4-Wire Analog - 2nd through 24th Lines, ordered same time for same location | \$ | 120.03 | \$ | 116.39 | \$ (3.64) | Variance resulted from change in item 1. |
| 13 | EEL 1-2-Wire Digital Loop, First Line | \$ | 258.53 | \$ | 271.99 | \$ 13.46 | Variance resulted from change in item 3. |
| 14 | EEL 1-2-Wire Digital, 2nd through 24th Lines, ordered same time for same location | \$ | 131.09 | \$ | 144.55 | \$ 13.46 | Variance resulted from change in item 4. |
| 15 | EEL 1-2-Wire Digital, 2nd through 24th Lines, ordered different times | \$ | 178.73 | \$ | 192.18 | \$ 13.46 | Variance resulted from change in item 3. |
| 16 | EEL 1 - 4-Wire 56, 64 kbps Digital Loop - First Line | \$ | 273.09 | \$ | 322.82 | \$ 49.73 | Variance resulted from change in item 6. |
| 17 | EEL 1-4-Wire 56, 64 kbps Digital, 2nd through 24th Lines, ordered same time for same loc. | \$ | 144.79 | \$ | 194.52 | \$ 49.73 | Variance resulted from change in item 7. |
| 18 | EEL 1-4-Wire 56, 64 kbps Digital, 2nd through 24th Lines, ordered different times | \$ | 193.29 | \$ | 243.02 | \$ 49.73 | Variance resulted from change in item 6. |
| Enhanced Extended Link (EEL 2); DS1 Loop, DS1 Transport |  |  |  |  |  |  |  |
| 19 | EEL 2- DS1 Loop, DS1 Interoffice Transport | \$ | 201.48 | \$ | 274.18 | \$ 72.70 | Variance resulted from change in item 9. |
| 20 | EEL 2 - DS1 Loop, DS1 Transport - Migrate | \$ | 82.68 | \$ | . | \$ (82.68) | Deleted NRC |
| Enhanced Extended Link (EEL 3); DS1 Loop, 3/1 Mux, DS3 Transport |  |  |  |  |  |  |  |
| 21 | EEL 3 - DS1 Loop - First DS1, DS $1 / 3$ Multiplexing, DS3 Interoffice Transport | \$ | 304.32 | \$ | 377.02 | \$ 72.70 | Variance resulted from change in item 9. |
| 22 | EEL 3- DS1 Loop - 2nd through 28th DS1's, DS1/3 Multiplexing, ordered same time for same loc | \$ | 169.53 | \$ | 242.23 | \$ 72.70 | Variance resulted from change in item 10. |
| 23 | EEL 3-DS1 Loop - 2nd through 28th DS1's, DS $1 / 3$ Multiplexing, ordered different times | s | 218.04 | \$ | 290.74 | \$ 72.70 | Variance resulted from change in item 9. |
| Local Switching |  |  |  |  |  |  |  |
| 24 | PBX Trunk Connection (DS1) | \$ | 132.45 | \$ | 205.15 | \$ 72.70 | Variance resulted from change in item 9 . |

## SUMMARY

| Service Order Charges | NRC |
| :--- | ---: |
| Service Orders |  |
| Manual Service Order | $\$$ |
| Electronic Service Order | $\mathbf{2 2 . 5 4}$ |
| Manual Service Order - Listing Only | 3.06 |
| Electronic Service Order - Listing Only | $\$$ |
| Manual Service Order - Change Only | $\$$ |
| Electronic Service Order - Change Only | $\mathbf{1 1 . 3 8}$ |
| LNP Administrative Charge | $\$$ |


| Installation Charges |  | NRC |
| :---: | :---: | :---: |
| Loops - Analog |  |  |
| 2-Wire New - First Line | \$ | 72.98 |
| 2-Wire New - Addt'l Line | \$ | 23.61 |
| 2 Wire Re-install (CT/DCOP/Migrate) | \$ | 14.21 |
| 4-Wire New - First Line | \$ | 94.15 |
| 4-Wire New - Addt' Line | \$ | 44.78 |
| 4 Wire Re-install (CT/DCOP/Migrate) | \$ | 21.52 |
| Loops - Digital |  |  |
| 2-Wire ISDN, BRI-IDSL Loop, First Line | \$ | 120.57 |
| 2-Wire ISDN, BRI-IDSL Loop, Addt'I Line | \$ | 72.93 |
| 2-Wire ISDN, BRI-IDSL Loop, Re-install (CT, DCOP,Migrate) | \$ | 22.36 |
| 56, 64 kbps Loop - First Line | \$ | 171.41 |
| 56, 64 kbps Loop - Addt'l Line | \$ | 122.90 |
| DS1, ISDN-PRI Loop - First Line | \$ | 194.38 |
| DS1, ISDN-PRI Loop - Addt'I Line | \$ | 145.87 |
| Loops - High-Capacity |  |  |
| Add DS3 to existing system | \$ | 86.28 |
| Add OC3 to existing system | \$ | 86.28 |
| Add OC12 to existing system | \$ | 86.28 |
| Loops - Dark Fiber |  |  |
| Dark Fiber Loop - Initial Patch Cord Installation, Field Location | \$ | 20.16 |
| Dark Fiber Loop - Additional Patch Cord Installation, Field Location, Same Time, Same Location | \$ | 7.20 |
| Dark Fiber Loop - Central Office Interconnection, 1-4 Patch Cords, per C.O. | \$ | 171.50 |
| Dark Fiber Loop - Special Construction for Fiber Pigtail |  | ICB |
| Sub-Loops |  |  |
| Sub-Loop Interconnection (Stub Cable) |  | ICB |
| 2-Wire First Line | \$ | 62.36 |
| 2-Wire Addt'I Line | \$ | 12.99 |
| 2-Wire Reinstall | \$ | 29.45 |
| 4-Wire First Line | \$ | 76.22 |
| 4-Wire Addt'I Line | \$ | 20.79 |
| 4-Wire Reinstall Line | \$ | 38.11 |
| 2W Disconnect Charge | \$ | 20.79 |
| 4W Disconnect Charge | \$ | 25.12 |
| Loops - xDSL-Capable |  |  |
| All Loops Less Than 18,000 Feet: Load Coil Removal; per xDSL-Capable Loop | \$ | 1.44 |
| 2-Wire xDSL Loop - First Line | \$ | 68.84 |
| 2-Wire xDSL Loop - Addt'l Line | \$ | 19.47 |
| 2-Wire xDSL Loop - Re-install (CT, DCOP, Migrate) | \$ | 10.08 |
| 4-Wire xDSL Loop - First Line | \$ | 85.58 |
| 4-Wire xDSL Loop - Addt'I Line | \$ | 37.08 |
| 4-Wire xDSL Loop - Re-install (CT,DCOP, Migrate) | \$ | 12.96 |


|  | Installation Charges (continued) | NRC |  |
| :---: | :---: | :---: | :---: |
|  | Loop Conditioning per Location |  |  |
|  | Engineering Charge - one per loop conditioned below | \$ | 28.03 |
|  | Travel Charge - one per loop conditioned below | \$ | 15.59 |
|  | Load Coil Removal; Loops Over 18,000 Feet |  |  |
|  | Unload cable pair, UG, loop > 18kf, per location | \$ | 397.39 |
|  | Unload additional cable pair, UG, same time, location \& cable, loop > 18kf | \$ | 3.06 |
|  | Unload cable pair, AE, loop > 18kf, per location | \$ | 6.96 |
|  | Unload addt'l cable pair, AE, same time, location \& cable, loop > 18kf | \$ | 1.61 |
|  | Unload cable pair, BU, loop > 18kf, per location | \$ | 6.96 |
|  | Unload addt'l cable pair, BU, same time, location \& cable, loop > 18kf | \$ | 1.61 |
|  | Remove Bridged Tap |  |  |
|  | Remove Bridged Tap, UG, per location | \$ | 394.78 |
|  | Remove one (1) additional Bridged Tap, UG, same time, location \& cable | \$ | 0.45 |
|  | Remove Bridged Tap, AE, per location | \$ | 5.74 |
|  | Remove one (1) additional Bridged Tap, AE, same time, location \& cable | \$ | 0.39 |
|  | Remove Bridged Tap, BU, per location | \$ | 5.74 |
|  | Remove one (1) additional Bridged Tap, BU, same time, location \& cable | \$ | 0.39 |
|  | Remove Repeater |  |  |
|  | Remove Repeater, UG, per location | \$ | 394.78 |
|  | Remove additional Repeater, UG, same time, location \& cable | \$ | 0.45 |
|  | Remove Repeater, AE per location | \$ | 5.74 |
|  | Remove additional Repeater, AE same time, location \& cable | \$ | 0.39 |
|  | Remove Repeater, BU per location | \$ | 5.74 |
|  | Remove additional Repeater, BU same time, location \& cable | \$ | 0.39 |
|  | UNE-Platform Combinations |  |  |
|  | UNE-P 2-Wire Analog Loop - First Line, Switching, Common Transport | \$ | 72.98 |
|  | UNE-P 2-Wire Analog Loop - Addt'I Line ordered same time to same location, Switching, Common Tr | \$ | 23.61 |
|  | UNE-P 2-Wire Analog Loop - Migrate Loop, Switching, Common Transport | \$ | 14.21 |
|  | Enhanced Extended Link; DS0 Loop, 1/0 Mux, DS1 Transport |  |  |
|  | EEL 1 - 2-Wire Analog - First Line | \$ | 224.39 |
|  | EEL 1-2-Wire Analog - 2nd through 24th Lines, ordered same time for same location | \$ | 95.22 |
|  | EEL 1-2-Wire Analog - 2nd through 24th Lines, ordered different times | \$ | 144.59 |
|  | EEL 1-4-Wire Analog - First Line | \$ | 245.56 |
| A | EEL 1-4-Wire Analog - 2nd through 24th Lines, ordered same time for same location | \$ | 116.39 |
|  | EEL 1-4-Wire Analog - 2nd through 24th Lines, ordered different times | \$ | 165.76 |
| A | EEL 1 - 2-Wire Digital Loop, First Line | \$ | 271.99 |
| A | EEL 1-2-Wire Digital, 2nd through 24th Lines, ordered same time for same location | \$ | 144.55 |
| A | EEL 1-2-Wire Digital, 2nd through 24th Lines, ordered different times | \$ | 192.18 |
| A | EEL 1-4-Wire 56, 64 kbps Digital Loop - First Line | \$ | 322.82 |
| A | EEL 1-4-Wire 56, 64 kbps Digital, 2nd through 24th Lines, ordered same time for same location | \$ | 194.52 |
| A | EEL 1-4-Wire 56, 64 kbps Digital, 2nd through 24th Lines, ordered different times | \$ | 243.02 |
|  | Enhanced Extended Link; DS1 Loop, DS1 Transport |  |  |
| A | EEL 2 - DS1 Loop, DS1 Interoffice Transport | \$ | 274.18 |
|  | Enhanced Extended Link; DS1 Loop, 3/1 Mux, DS3 Transport |  |  |
| A | EEL 3 - DS1 Loop - First DS1, DS1/3 Multiplexing, DS3 Interoffice Transport | \$ | 377.02 |
| A | EEL 3-DS1 Loop - 2nd through 28th DS1's, DS1/3 Multiplexing, ordered same time for same loc. | \$ | 242.23 |
| A | E.EL 3 - DS1 Loop - 2nd through 28th DS1's, DS1/3 Multiplexing, ordered different times | \$ | 290.74 |
|  | EEL 3 - DS1 Loop - Migrate DS1 to CLEC DS3 | \$ | 82.68 |
|  | Local Switching |  |  |
|  | PBX Trunk Connection Analog | \$ | 86.95 |
|  | PBX Trunk Connection (DSO) | \$ | 86.95 |
| A | PBX Trunk Connection (DS1) | \$ | 205.15 |


| Installation Charges (continued) |  | NRC |
| :---: | :---: | :---: |
| Switch Features |  |  |
| Custom Calling Feature Package | \$ | 3.25 |
| CLASS Feature Package | \$ | 3.90 |
| Centrex Feature Package | \$ | 24.86 |
| Direct Connect | \$ | 15.73 |
| Conference Calling 6-Way Station Control | \$ | 15.73 |
| Multiline Hunt Service | \$ | 15.73 |
| Dial Transfer to Tandem Tie Line | \$ | 74.54 |
| Meet-Me Conference | \$ | 22.84 |
| 3-Way Conference/Consultation Hold/Transfer | \$ | 15.73 |
| Customized Routing |  |  |
| Switch Analysis | \$ | 86.18 |
| Host Switch Translations | \$ | 1,723.60 |
| Remote Switch Translations | \$ | 1,292.70 |
| Host TOPS Translations | \$ | 344.72 |
| Remote TOPS Translations | \$ | 172.36 |
| Operator Services Branding |  |  |
| 0 + Ten Digits | \$ | 3,643.19 |
| 411 | \$ | 800.00 |
| Transport |  |  |
| 911 Trunk 2 Wire Analog | \$ | 116.44 |
| Transport - DS1 Dedicated - Install | \$ | 79.80 |
| Transport - DS1 Migrate | \$ | 82.68 |
| Transport - DS3 Dedicated - Install | \$ | 86.28 |
| Interoffice Transmission-STP Ports | \$ | 238.81 |
| Interoffice Transmission-STP Link ( 56 kbps ) | \$ | 151.02 |
| Multiplexing - DS1-DS0 | \$ | 71.61 |
| Multiplexing - DS3-DS1 | \$ | 96.36 |
| Dark Fiber Transport - Initial Installation, 1-4 Patch Cords, per C. O. | \$ | 171.50 |


| Other Charges | NRC |  |
| :---: | :---: | :---: |
| Other |  |  |
| SS7 - Originating Point Code Service | \$ | 21.55 |
| SS7 - Global Title Address Translation | \$ | 10.77 |
| Nid Installation | \$ | 17.32 |
| Pre-Order Digital Loop Qualification Inquiry | \$ | 28.20 |
| 2-Wire Digital Data Loop Cooperative Testing | \$ | 31.02 |
| 4-Wire Digital Data Loop Cooperative Testing | \$ | 39.25 |
| Trouble Isolation and Testing | \$ | 37.48 |
| Trip Charge | \$ | 15.59 |
| Dark Fiber End-to-End Testing, Initial Strand | \$ | 47.51 |
| Dark Fiber End-to-End Testing, Subsequent Strands | \$ | 14.40 |


|  | Installation Charges - 2-Wire \& 4-Wire Analog Loop |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { "̈ } \\ & 0 \\ & 0 \\ & 0 \\ & \frac{\kappa}{2} \\ & \text { 융 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { O } \\ & 0 \\ & \text { o } \\ & 0 \\ & 5 \\ & 0.5 \\ & 0.0 \\ & 3 \\ & \hline \end{aligned}$ |  |
|  | $\stackrel{\text { ¢ }}{\text { ¢ }}$ | $\stackrel{\sim}{\otimes}$ | $\stackrel{\text { ® }}{\stackrel{\sim}{\otimes}}$ | $\stackrel{\sim}{\otimes}$ | "齐 | $\stackrel{\sim}{\otimes}$ | $\stackrel{\text { E }}{\text { E/ }}$ | 范 | bo |  |  |  |  |  |  |  |  |
| 2 Wire Analog Loops - First Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$62.36 |
| Outside Plant Interconnection Cost | 21 | 5 | 18 | 3 | 5 | 20 |  |  |  | 72 | 0 | 0 | 100\% | 72.0 | 0.0 | 0.0 |  |
| Central Office Interconnection Cost |  |  |  |  |  |  | 7 | 2 |  | 0 | 9 | 0 | 100\% | 0.0 | 9.0 | 0.0 | \$6.48 |
| Provision NGDLC (Reduce by NGDLC Factor) |  |  |  |  |  |  |  |  | 8 | 0 | 0 | 8 | 71.83\% | 0.0 | 0.0 | 5.7 | \$4.14 |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  | 72.0 | 9.0 | 5.7 | \$72.98 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 Wire Analog Loops - Add'I Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$12.99 |
| Outside Plant Interconnection Cost | 9 | 4 | 0 | 2 | 0 | 0 |  |  |  | 15 | 0 | 0 | 100\% | 15.0 | 0.0 | 0.0 |  |
| Central Office Interconnection Cost |  |  |  |  |  |  | 7 | 2 |  | 0 |  | 0 | 100\% | 0.0 | 9.0 | 0.0 | $\$ 6.48$$\$ 4.14$ |
| Provision NGDLC (Reduce by NGDLC Factor) |  |  |  |  |  |  |  |  | 8 | 0 | 0 | 8 | 71.83\% | 0.0 | 0.0 | 5.7 |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  | 15.0 | 9.0 | 5.7 | \$23.61 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 Wire Re-install (CT/DCOP/Migrate) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$0.00 |
| Outside Plant Interconnection Cost | 0 | 0 | 0 | 0 |  | 0 |  |  |  | 0 | 0 | 0 | 100\% | 0.0 | 0.0 | 0.0 |  |
| Central Office Interconnection Cost |  |  |  |  | 5 |  | 7 | 2 |  |  | 14 | 0 | 100\% | 0.0 | 14.0 | 0.0 | $\begin{array}{r} \$ 10.08 \\ \$ 4.14 \end{array}$ |
| Provision NGDLC (Reduce by NGDLC Fador) |  |  |  |  |  |  |  |  | 8 | 0 | 0 | 8 | 71.83\% | 0.0 | 0.0 | 5.7 |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 | 14.0 | 5.7 | \$14.21 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Wire Analog Loops - First Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$76.22 |
| 4W Outside Plant Interconnection Cost | 30 | 10 | 18 | 5 | 5 | 20 |  |  |  | 88 | 0 | 0 | 100\% | 88.0 | 0.0 | 0.0 |  |
| 4 W Central Office interconnection Cost |  |  |  |  |  |  | 14 | 3 |  | 0 | 17 | 0 | 100\% | 0.0 | 17.0 | 0.0 | \$12.24 |
| 4W Provision NGDLC (Reduce by NGDLC Factor) |  |  |  |  |  |  |  |  | 11 | 0 | 0 | 11 | 71.83\% | 0.0 | 0.0 | 7.9 | \$5.69$\$ 94.15$ |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  | 88.0 | 17.0 | 7.9 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Wire Analog Loops - Additional Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$26.85 |
| 4W Outside Plant Interconnection Cost | 18 | 9 | 0 | 4 | 0 | 0 |  |  |  | 31 | 0 | 0 | 100\% | 31.0 | 0.0 | 0.0 |  |
| 4 W Central Office Interconnection Cost |  |  |  |  |  |  | 14 | 3 |  | 0 | 17 | 0 | 100\% | 0.0 | 17.0 | 0.0 | \$12.24 |
| 4W Provision NGDLC (Reduce by NGDLC Factor) |  |  |  |  |  |  |  |  | 11 | 0 | , | 11 | 71.83\% | 0.0 | 0.0 | 7.9 | $\begin{array}{r} \$ 5.69 \\ \$ 44.78 \end{array}$ |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  | 31.0 | 17.0 | 7.9 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Wire Re-install (CT/DCOP/Migrate) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$0.00 |
| 4W Outside Plant Interconnection Cost | 0 | 0 | 0 | 0 |  | 0 |  |  |  | 0 | 0 | 0 | 100\% | 0.0 | 0.0 | 0.0 |  |
| 4W Central Office interconnection Cost |  |  |  |  | 5 |  | 14 | 3 |  | 0 | 22 | 0 | 100\% | 0.0 | 22.0 | 0.0 | \$15.84 |
| 4W Provision NGDLC (Reduce by NGDLC Factor) |  |  |  |  |  |  |  |  | 11 | 0 | 0 | 11 | 71.83\% | 0.0 | 0.0 | 7.9 | $\begin{array}{r} \$ 5.69 \\ \$ 21.52 \end{array}$ |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 | 22.0 | 7.9 |  |





| Installation Charges - 56, 64 kbps Loop |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First or New Line |  |  |  |  |  |  |
|  | Minutes | Hours | Rate | NRC |  | ighted |
| Copper Served $28 \%$ |  |  |  |  |  |  |
| OSP Facility Coordinator | 2 | 0.03 | \$ 30.07 | \$ 1.00 |  |  |
| OSP Engineer | 20 | 0.33 | \$ 37.37 | \$ 12.46 |  |  |
| ASR Engineer | 30 | 0.50 | \$ 43.09 | \$ 21.55 |  |  |
| Connect MDF Jumper | 14 | 0.23 | \$ 43.19 | \$ 10.08 |  |  |
| Trip | 18 | 0.30 | \$ 51.97 | \$ 15.59 |  |  |
| Install NID | 20 | 0.33 | \$ 51.97 | \$ 17.32 |  |  |
| Terminate at NID or protector | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |  |
| Outside Plant interconnection | 30 | 0.50 | \$ 51.97 | \$ 25.99 |  |  |
| Conduct testing | 32 | 0.53 | \$ 51.97 | \$ 27.72 |  |  |
| Close Order | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |  |
| Total | 176 | 2.93 |  | \$ 140.36 | \$ | 39.54 |
| Small-DLC Served 5 |  |  |  |  |  |  |
| OSP Facility Coordinator | 2 | 0.03 | \$ 30.07 | \$ 1.00 |  |  |
| OSP Engineer | 20 | 0.33 | \$ 37.37 | \$ 12.46 |  |  |
| ASR Engineer | 30 | 0.50 | \$ 43.09 | \$ 21.55 |  |  |
| Connect MDF Jumper | 14 | 0.23 | \$ 43.19 | \$ 10.08 |  |  |
| Connect jumper DSX to fiber system 15 0.25 $\$ 43.19$ $\$ 10.80$ |  |  |  |  |  |  |
| Cremote fiber system <br> remper  15 0.25 $\$ 43.19$ $\$$ 10.80 |  |  |  |  |  |  |
| Place Plug-in Cards | 2 | 0.03 | \$ 43.19 | \$ 1.44 |  |  |
| Option Plug-in cards 10 0.17 $\$ 43.19$ $\$ 7.20$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Install NID | 20 | 0.33 | \$ 51.97 | \$ 17.32 |  |  |
| Terminate at NID or protector 5 0.08 $\$ 81.97$ $\$ 8$ 4.33 |  |  |  |  |  |  |
| Outside Plant interconnection | 30 | 0.50 | \$ 51.97 | \$ 25.99 |  |  |
|  |  |  |  |  |  |  |
| Conduct testing | 32 | 0.53 | \$ 51.97 | \$ 27.72 |  |  |
| Close Order | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |  |
|  | 233 | 3.88 |  | \$ 183.59 | \$ | 8.69 |
| Large-DLC Served $67 \%$ |  |  |  |  |  |  |
| OSP Facility Coordinator | 2 | 0.03 | \$ 30.07 | \$ 1.00 |  |  |
| OSP Engineer | 20 | 0.33 | \$ 37.37 | \$ 12.46 |  |  |
| ASR Engineer | 30 | 0.50 | \$ 43.09 | \$ 21.55 |  |  |
| Connect MDF Jumper | 14 | 0.23 | \$ 43.19 | \$ 10.08 |  |  |
| Connect jumper DSX to fiber system 15 0.25 $\$ 43.19$ $\$ 10.80$ |  |  |  |  |  |  |
| Connect jumper <br> remote fiber system 15 0.25 $\$ 43.19$ $\$ 10.80$ |  |  |  |  |  |  |
| Place Plug-in Cards | 2 | 0.03 | \$ 43.19 | \$ 1.44 |  |  |
| Option Plug-in cards | 10 | 0.17 | \$ 43.19 | \$ 7.20 |  |  |
| Loop Qualification |  | - |  | \$ |  |  |
| Trip | 18 | 0.30 | \$ 51.97 | \$ 15.59 |  |  |
| Install NID | 20 | 0.33 | \$ 51.97 | \$ 17.32 |  |  |
| Terminate at NID or protector | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |  |
| Outside Plant interconnection | 30 | 0.50 | \$ 51.97 | \$ 25.99 |  |  |
| Circuit Engineering Provisioning | 15 | 0.25 | \$ 51.97 | \$ 12.99 |  |  |
| Conduct testing | 32 | 0.53 | \$ 51.97 | \$ 27.72 |  |  |
| Close Order | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |  |
|  | 233 | 3.88 |  | \$ 183.59 | \$ | 123.17 |
| TOTAL NRC \$ 171.41 |  |  |  |  |  |  |

Installation Charges - 56, 64 kbps Loop


| Installation Charges - DS1, ISDN-PRI Loop |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| First or New Line |  |  |  |  |  |
|  | Minutes | Hours | Rate | NRC | \% weighted |
| Copper Served |  |  |  |  | 28\% |
| OSP Facility Coordinator | 15 | 0.25 | \$ 30.07 | \$ 7.52 |  |
| OSP Engineer | 20 | 0.33 | \$ 37.37 | \$ 12.46 |  |
| ASR Engineer | 30 | 0.50 | \$ 43.09 | \$ 21.55 |  |
| Connect MDF Jumper | 14 | 0.23 | \$ 43.19 | \$ 10.08 |  |
| Trip | 18 | 0.30 | \$ 51.97 | \$ 15.59 |  |
| Install NID | 20 | 0.33 | \$ 51.97 | \$ 17.32 |  |
| Terminate at NID or protector | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |
| Outside Plant Interconnection | 30 | 0.50 | \$ 51.97 | \$ 25.99 |  |
| Conduct testing | 51 | 0.85 | \$ 51.97 | \$ 44.17 |  |
| Close Order | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |
| Total | 208 | 3.47 |  | \$ 163.33 | \$ 46.01 |
| Small-DLC Served 5 |  |  |  |  |  |
| OSP Facility Coordinator | 15 | 0.25 | \$ 30.07 | \$ 7.52 |  |
| OSP Engineer | 20 | 0.33 | \$ 37.37 | \$ 12.46 |  |
| ASR Engineer | 30 | 0.50 | \$ 43.09 | \$ 21.55 |  |
| Connect MDF Jumper | 14 | 0.23 | \$ 43.19 | \$ 10.08 |  |
| Connect jumper DSX to fiber system | 15 | 0.25 | \$ 43.19 | \$ 10.80 |  |
| Connect jumper between DSX and <br> remote fiber system | 15 | 0.25 | \$ 43.19 | \$ 10.80 |  |
| Place Plug-in Cards | 2 | 0.03 | \$ 43.19 | \$ 1.44 |  |
| Option Plug-in cards | 10 | 0.17 | \$ 43.19 | \$ 7.20 |  |
| Loop Qualification |  | - |  | \$ |  |
| Trip | 18 | 0.30 | \$ 51.97 | \$ 15.59 |  |
| Install NID | 20 | 0.33 | \$ 51.97 | \$ 17.32 |  |
| Terminate at NID or protector | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |
| Outside Plant Interconnection | 30 | 0.50 | \$ 51.97 | \$ 25.99 |  |
| Circuit Engineering Provisioning | 15 | 0.25 | \$ 51.97 | \$ 12.99 |  |
| Conduct testing | 51 | 0.85 | \$ 51.97 | \$ 44.17 |  |
| Close Order | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |
|  | 265 | 4.42 |  | \$ 206.56 | \$ 9.78 |
| Large-DLC Served $\quad 67 \%$ |  |  |  |  |  |
| OSP Facility Coordinator | 15 | 0.25 | \$ 30.07 | \$ 7.52 |  |
| OSP Engineer | 20 | 0.33 | \$ 37.37 | \$ 12.46 |  |
| ASR Engineer | 30 | 0.50 | \$ 43.09 | \$ 21.55 |  |
| Connect MDF Jumper | 14 | 0.23 | \$ 43.19 | \$ 10.08 |  |
| Connect jumper DSX to fiber system | 15 | 0.25 | \$ 43.19 | \$ 10.80 |  |
| Connect jumper between DSX and remote fiber system | 15 | 0.25 | \$ 43.19 | \$ 10.80 |  |
| Place Plug-in Cards | 2 | 0.03 | \$ 43.19 | \$ 1.44 |  |
| Option Plug-in cards | 10 | 0.17 | \$ 43.19 | \$ 7.20 |  |
| Loop Qualification |  | - |  | \$ |  |
| Trip | 18 | 0.30 | \$ 51.97 | \$ 15.59 |  |
| Install NID | 20 | 0.33 | \$ 51.97 | \$ 17.32 |  |
| Terminate at NID or protector | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |
| Outside Plant Interconnection | 30 | 0.50 | \$ 51.97 | \$ 25.99 |  |
| Circuit Engineering Provisioning | 15 | 0.25 | \$ 51.97 | \$ 12.99 |  |
| Conduct testing | 51 | 0.85 | \$ 51.97 | \$ 44.17 |  |
| Close Order | 5 | 0.08 | \$ 51.97 | \$ 4.33 |  |
|  | 265 | 4.42 |  | \$ 206.56 | \$ 138.59 |
| TOTAL NRC |  |  |  |  | \$ 194.38 |



## Installation Charges - UNE-P Combinations and EEL1, EEL2, EEL3

| UNE-Platform Combinations |  |
| :--- | :--- |
| UNE-P 2-Wire Analog Loop - First Line, Switching, Common Transport |  |
| 2-Wire Analog Loop | $\$$ |
| Switching | $\$$ |
| Common Transport | $\$$ |
| Total | $\$$ |
|  | - |
| UNE-P 2-Wire Analog Loop - Addt'I Line ordered same time to same location, Switching, <br> Common Transport |  |
| UNE-P 2-Wire Analog Loop - Addt'I Line ordered same time to same location | 72.98 |
| Switching | $\$$ |
| Common Transport | $\$$ |
| Total | $\$$ |
|  | $\$$ |
| UNE-P 2-Wire Analog Loop - Migrate Loop, Switching, Common Transport | 23.61 |
| UNE-P 2-Wire Analog Loop - Migrate Loop | - |
| Switching | $\mathbf{2 3 . 6 1}$ |
| Common Transport | $\$$ |
| Total | $\$$ |

## Installation Charges - UNE-P Combinations and EEL1, EEL2, EEL3




## Installation Charges - UNE-P Combinations and EEL1, EEL2, EEL3

| Enhanced Extended Link; DS1 Loop, DS1 Transport |  |  |
| :---: | :---: | :---: |
| EEL 2 - DS1 Loop, DS1 Interoffice Transport |  |  |
| DS1 Loop | \$ | 194.38 |
| DS1 Interoffice Transport | \$ | 79.80 |
| Total | \$ | 274.18 |
|  |  |  |
| Enhanced Extended Link; DS1 Loop, 3/1 Mux, DS3 Transport |  |  |
| EEL 3 - DS1 Loop - First DS1, 3/1 Multiplexing, DS3 Interoffice Transport |  |  |
| DS1 Loop - First DS1 | \$ | 194.38 |
| 3/1 Multiplexing | \$ | 96.36 |
| DS3 Interoffice Transport | \$ | 86.28 |
| Total | \$ | 377.02 |
|  |  |  |
| EEL 3 - DS1 Loop - 2nd through 28th DS1's, 3/1 Multiplexing, ordered same time for same location, DS3 Transport |  |  |
| DS1 Loop - 2nd through 28th DS1's, ordered same time for same location | \$ | 145.87 |
| 3/1 Multiplexing, ordered same time for same location | \$ | 96.36 |
| DS3 Transport |  |  |
| Total | \$ | 242.23 |
|  |  |  |
| EEL 3 - DS1 Loop - 2nd through 28th DS1's, 3/1 Multiplexing, ordered different times, DS3 Transport |  |  |
| DS1 Loop - 2nd through 28th DS1's, ordered different times | \$ | 194.38 |
| 3/1 Multiplexing, ordered different times | \$ | 96.36 |
| DS3 Transport |  |  |
| Total | \$ | 290.74 |
|  |  |  |
| EEL 3-DS1 Loop - Migrate DS1 Transport to CLEC DS3 |  |  |
| DS1 Loop | \$ | - |
| 3/1 Mux | \$ | - |
| DS3 Transport | \$ | 82.68 |
| Total | \$ | 82.68 |



