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January 27, 2004

Ms. Blanca Bayo'
Director
Division of Administrative Services and Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Docket No. 981834

Dear Ms. Bayo':

It has come to our attention that several pages may have been omitted from the pre-filed surrebuttal testimony of Sprint's witness, Jimmy R. Davis, when it was filed with the Commission on September 26, 2003, although a complete version of the testimony was served on the parties via electronic mail. To ensure that the Commission's records reflect the complete testimony, Sprint is filing the original plus 15 of the complete version (42 pages) of the testimony previously served electronically on the parties. A copy is also being served on the parties in this docket, pursuant to the attached Certificate of Service.

Please acknowledge receipt of this filing by stamping and initialing a copy of this letter and returning same to the courier. If you have any questions, please do not hesitate to call me at 850/599-1560.

Sincerely,

Susan S. Masterton

Susan S. Masterton

Enclosures

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CERTIFICATE OF SERVICE
DOCKET NO. 981834-TP & 990321-TP

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(+ Signed Protective Agreement)

BEFORE THE PUBLIC SERVICE COMMISSION

SURREBUTTAL TESTIMONY OF

Jimmy R. Davis

September 26, 2003

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INTRODUCTION

Q. Please state your name, place of employment, and business address.

A. My name is Jimmy R. Davis. I am employed by Sprint/United Management Company as a Senior Manager – Network Costing at 6450 Sprint Parkway, Overland Park, Kansas 66251. I am testifying on behalf of Sprint-Florida, Incorporated and Sprint Communications Company Limited Partnership (hereafter collectively referred to as "Sprint" or the "Company").

Q. Are you the same Jimmy R. Davis who previously filed direct and rebuttal testimonies in this case?

A. Yes.

Q. What is the purpose of your Surrebuttal Testimony?

A. I am introducing a Revised Exhibit JRD-2 which is Sprint's collocation cost study and associated element rate list. Revised Exhibit JRD-2 replaces the original Exhibit JRD-2, which was included with my direct testimony submitted on February 4, 2003. This revised study incorporates changes in the COR percentage for cross connect and power cable removal as explained in Sprint's Response to Staff's Interrogatory Number 72 part b. The revised study also reflects a recalculation of Sprint's floor space rate which is explained in detail later in my testimony. In addition, I will respond to the Rebuttal Testimony of AT&T witness Mr. Steve Turner in a number of costs related areas. Specifically, my testimony deals with Mr. Turner's comments relating to the use of BellSouth's collocation cost model as a common model in the state of Florida and his recommendation of using the same cost inputs for all three ILECs. Sprint's witness Randy Farrar also addresses issues relating to Mr. Turner's proposal in

his Surrebuttal Testimony, also filed today. I will also respond to the rebuttal testimonies of Staff witnesses Dr. David Gabel and Mr. Roland Curry regarding their comments on Sprint's cost inputs and study methodologies for various collocation rate elements.

Net Present Value Analysis is a Simple Solution to Cost Comparisons Among ILECs With Different Collocation Models

Q. On page 3 of his Rebuttal Testimony (lines 20 – 22), Mr. Turner claims that the use of three different collocation cost models makes it "almost impossible" to compare collocation costs. Do you agree with Mr. Turner's claim?

A. No, not at all. As an operating ALEC, Sprint routinely analyzes collocation costs of various ILECs in multiple states. In these analyses, Sprint deals with all types of variations in collocation cost structures.

Q. What types of variations in cost structures does Sprint encounter?

A. As expected there is the mix of one time non-recurring charges (NRCs) and monthly recurring charges (MRCs). Some ILECs recover certain costs up front through NRCs while others shift those costs to MRCs and recover them over time. In addition, some ILECs recover certain NRCs (e.g. project planning) on a per square foot basis as opposed to on a per job basis. Yet another example is that while some ILECs (like SBC and Verizon) recover cost for HVAC as a function of DC amps ordered, others recover HVAC through their floor space rate.

Q. On page 10 of his Rebuttal Testimony, Mr. Turner advocates the use of the BellSouth Collocation Model as the standard model for collocation pricing in

Florida. Should the Florida Commission order the use of the BellSouth Collocation Costs model in Florida, won't ALECs like Sprint who operate in numerous states including Florida still have to contend with multiple collocation cost models?

A. Yes, certainly. BellSouth only operates in the southeastern United States, so even if their model were the standard model in all of their states that would not address the fact that ALECs who operate both within and beyond the southeast would still contend with multiple models. In addition to BellSouth, Sprint's ALEC operation purchases collocation from Qwest, SWBT, Verizon–Bell Atlantic, Verizon–GTE, PacBell, and Ameritech all of which have differing collocation rate structures.

Q. So how does Sprint manage the variations of collocation cost structures among ILECs in various states?

A. It's quite simple really. Net Present Value (NPV) comparisons are used by Sprint to shift NRCs and MRCs into a common point in time. Sprint makes comparisons on a year-by-year and an accumulative basis.

Q. Has Sprint made NPV comparisons as part of this proceeding?

A. Yes. Exhibit JRD-3 contains NPV comparisons between Sprint and Verizon for two of the five physical collocations provided to Staff in Sprint's Response to Staff's Interrogatory Number 1. Sprint used Verizon's Response to Staff's interrogatories Numbers 224 and 225 to Verizon in which Staff asked Verizon to select the collocation rate elements needed to provision the two Sprint physical collocations. Sprint did have to make a few adjustments to what Verizon identified as necessary elements for the Sprint collocations however to ensure that all costs like cage ground bar (Verizon element 10) and DC power and cross connect cable material (represented by Verizon elements 100 through 111) were

accounted for. Exhibit JRD – 3 also contains similar NPV comparisons between Sprint and BellSouth, which involve key assumptions explained below.

Q. Could the Florida Commission Staff use NPV analysis to compare collocation costs among the three ILECs in this case?

A. Yes. Through discovery, Staff asked all three companies for similar information regarding their last five physical and virtual collocations. Furthermore, Staff asked all three ILECs to select collocation elements from their own cost structures necessary to provision selected collocations of the other two. Caution must be exercised however when making comparisons with BellSouth because under the BellSouth collocation cost structure, ALECs provision their own DC power and cross connect cables using BellSouth approved vendors. It should be noted that for collocations in BellSouth central offices, ALECs also provide all DC power and cross connect cable materials and bear the cost of engineering and project planning outside of BellSouth's cost structure. The comparisons between Sprint and BellSouth on Exhibit JRD–3 incorporate Sprint's costs from its collocation cost study for the cost components borne by the ALEC. The investment costs included in Sprint's collocation cost study from cross connects (recovered as MRCs by Sprint) are incorporated as NRCs for the purpose of comparison with BellSouth.

Sprint's Set of Collocation Elements is Comprehensive

Q. On page 10, line 25 of his Rebuttal Testimony, Mr. Turner asserts that Sprint's collocation rate list is "extremely limited" and "does not begin to

address all the necessary rate elements for collocation". Do you agree with this assertion?

A. Absolutely not! Sprint has provided more than 700 collocations system wide and has fulfilled all ALEC requests for collocation rate elements. As can be seen in Sprint's Response to Staff's Interrogatories Numbers 54 and 55, many of Sprint's elements encompass multiple elements of Verizon and Bell. For example, Sprint's single collocation element for floor space covers the cost of Verizon's elements of Floor Space (element 36 or 37), Space Modification (element 34), Environmental Conditioning (element 35), and Cage Ground Bar (element 10), all of which are necessary to provide collocation. In like manner, Sprint's collocation element for DS0 cross connects encompasses Verizon's elements of Overhead Superstructure (element 11), Facility Pull (element 13), DS0 Termination (element 15), Cable Rack Shared Space (element 44), Facility Termination (element 47), and Facility Cable –DS0 Cable (element 100), all of which are necessary to provide collocation. Sprint's collocation rate element lists are reviewed by both Sprint wholesale and Sprint ALEC operations for completeness. Furthermore, our experience tells us that ALECs like a more simple, straightforward rate structure. As an ALEC, Sprint advocates simplicity because it facilitates invoice auditing. Even Mr. Turner calls collocation "straightforward" (p 9, ln14), and Sprint sees no reason to complicate matters by having an unnecessarily complex rate structure.

Q. **Has AT&T provided information on what specific collocation elements it believes are missing from Sprint's rate list?**

A. Yes. AT&T listed what they believe are missing collocation elements in its Response to Staff's Interrogatory to AT&T Number 79.

Q. What comments does Sprint want to make concerning AT&T's list of "missing" elements provided in their response to Staff's Interrogatory to AT&T number 79 part a) dealing with physical collocation?

A. First, AT&T listed a series of 13 "disconnect only" rate elements. Sprint considers mass service disconnection to be a part of the decommissioning process. As described in under my direct testimony for issue 1C (pages 3 and 4), should an ALEC request to decommission a collocation site, Sprint's major augmentation fees would apply. If however, an ALEC loses a customer prior to decommissioning, Sprint may apply its UNE loop disconnect rates approved under Docket 990649-TP. Next, AT&T listed an element for a "2 fiber cross connect" (BellSouth element number H.1.31) for which Sprint has never received a request. Sprint's experience is that ALECs prefer to have redundancy with their fiber services which require a 4 fiber cross connect. Furthermore, BellSouth's rate elements for 2 and 4 fiber cross connects cover only jumper work since all cross connect cabling in BellSouth's collocation arrangements is self-provisioned by the ALEC. AT&T listed the BellSouth element called a "power reduction fee" (BS Element H.1.60). Sprint covers this need as a minor augment if only fuses need changing or as a major augment if DC power connections need altering. Then, AT&T listed a series of 5 Copper Entrance Cable related elements which are covered under Sprint's "Internal Cable Space" and "Internal Cable" elements. Finally, AT&T listed a series of adjacent and remote collocation rate elements as part of its Response to Staff's Interrogatory to AT&T Number 79 part a). To date, Sprint has not provisioned adjacent or remote collocation in any of its

operating territories in any state and has no cost-based data upon which to base standard rates. These collocation arrangements are not common, nor are they standard and therefore do not lend themselves to developing accurate generic rates. Due to the variability of configurations involved in adjacent and remote terminal collocation, Sprint proposes to cost adjacent or remote collocation on an individual case basis.

Q. Is Sprint's rate element for internal cable – per 100 pair copper stub cable intended for virtual collocation only?

A. Yes, and for good reason. Sprint's policy is for all copper entrance facilities to terminate on Sprint's mainframe to ensure the proper protection from the remainder of the office from lightning surges and electromagnetic interference. Since the copper cable is terminated on Sprint's mainframe, Sprint's policy is to perform all associated maintenance. If copper entrance facilities were categorized as physical collocation, the implication would be that the ALEC would perform the maintenance.

Q. What comments does Sprint want to make concerning AT&T's list of "missing" elements provided in its Response to Staff's Interrogatory to AT&T Number 79 part b) dealing with virtual collocation?

A. AT&T listed a series of (eight) "disconnect only" rate elements. Again, Sprint considers mass service disconnection to be a part of the decommissioning process. The only other element listed by AT&T under its Response to Staff's Interrogatory 79 part b) was 2-wire cross connects for virtual collocation. BellSouth's cross connect related elements (H.1.9 through H.1.12) only cover the actual "jumper" which connects the ILEC owned UNE loop with the ALEC owned interoffice cross connect cabling. Under BellSouth's model, the ALEC

self provisions all cross connect and power cabling. Sprint achieves cost recovery for 2 wire cross connects using UNE loop NRC's approved under Docket 990649-TP.

Collocation is Significantly More Risky Than Other UNEs

Q. On page 11 of his Rebuttal Testimony, Mr. Turner states that since collocation is the vehicle used for ALECs to obtain access to UNE loops, "it is only reasonable that the same cost factors that are used to establish the cost for unbundled elements should be used to establish the costs for collocation...". Do you agree?

A. No. There are significant differences between collocation as a UNE and the UNE loops ALECs gain access to through collocation. First of all, as explained in Sprint's Response to Staff's Interrogatory Number 74 and in my Rebuttal Testimony (Davis Rebuttal page 7, line 13 through page 8, line 7), collocation arrangements are uniquely designed and built to meet a particular ALEC's specific needs. Conversely, UNE loops are not built for the ALEC at all; rather, they are built by the ILEC in the normal course of business for the purpose of serving an end user. Should an ALEC discontinue service, the ILEC can use the same loop to serve the end customer. Collocation arrangements, on the other hand, are of no use to Sprint in serving the end customer. Once an ALEC has discontinued use of its collocation arrangement, if not sold to another ALEC, it will likely have to be decommissioned or redesigned and re-built. In any scenario, collocation arrangements are of no use to the ILEC.

Q. What collocation cost inputs did Sprint modify as a result of the unique nature of collocation arrangements as opposed to the UNEs associated with Docket Number 990649 – TP?

A. As explained in Sprint's Response to Staff's Interrogatory Number 11, the depreciation lives were reduced to reflect the most current lives supported by Sprint. Sprint considers this to be a very conservative adjustment given that over half of the collocations built by Sprint since 1996 have already been abandoned as reported in Sprint's Response to Staff's Interrogatory Number 69. In addition, Sprint used actual decommissioning work order cost to arrive at an appropriate cost of removal for collocation cable elements (power and cross connect). These elements in particular are costly to remove as compared to their investment value; therefore, a higher cost of removal percentage is appropriate to match cost recovery with cost causation. This added cost of removal is discounted, however to reflect that removal costs are incurred in a future period.

The BellSouth Model Will Not Meet Sprint's Needs for Costing Collocation

Q. As stated earlier, Mr. Turner advocates the use of the BellSouth Collocation Model as the standard model for collocation pricing in Florida. Does the BellSouth Company Specific Collocation Model meet Sprint's needs for cost recovery?

A. No. Several types of costs incurred by Sprint in the course of ALEC collocation are missing from BellSouth's Collocation Model. This is of a particular concern given BellSouth's Response to Staff's Interrogatory to BellSouth Number 112 which asked about adding collocation elements to BellSouth's cost model.

BellSouth's reply was that "the user is not able to modify the structure of the study by adding or deleting elements".

Q. Please provide examples of collocation costs incurred by Sprint, that are absent in BellSouth's company specific model.

A. As mentioned above, the BellSouth model assumes the ALEC self provisions its DC power cable connections (Sprint elements 13 – 19 on page 5 of 107 in Exhibit JRD-2) using BellSouth's approved vendors. Furthermore, BellSouth's model assumes the ALEC provides their own cross connect cable material (for DS0, DS1, and DS3) and installation labor for cross connects. Other cost elements excluded from BellSouth's model are: Project Management Fees for collocation build outs (either direct billed from the approved vendor to the ALEC or absorbed by the ALEC), shared and common space in its floor space rate element and manhole, conduit and cable vault space for its cable entrance facilities.

Q. On page 7, lines 6-8 of his Rebuttal Testimony, Mr. Turner makes a statement that all cost models "develop the investment for the particular component including any installation cost and related support investments". Does BellSouth's model build investments for BellSouth's collocation rate elements?

A. No. The BellSouth model does not build investments. As an example, the DC power plant investment per amp is developed as a separate study and is incorporated as an input into the BellSouth model as opposed to being developed within the BellSouth model.

Q. In contrast to the BellSouth model, how does Sprint's collocation cost model develop the DC power investment per amp?

A. Sprint's model starts with equipment costs for the individual components of a DC power plant and builds the cost of each size of plant based on design criteria provided by a Sprint DC power engineer. Engineering and installation labor is added to provide a complete investment cost per amp for various sizes of the DC power plants used in Sprint's ILEC territory (see Workpaper 5.0 of Revised Exhibit JRD-2). Finally, a weighted average investment per amp is developed using actual DC power plant sizes for each central office in Sprint's Florida operation. Thus, Sprint's collocation cost model does "develop the investment for the particular component including any installation cost and related support investments" which is the structure Mr. Turner says all cost models have (Turner Rebuttal page 7, lines 6-7). If Sprint were to use the BellSouth model, Sprint would have to separately develop an investment cost per DC amp as does BellSouth.

Using the Same Inputs for All Three ILECs is Not Appropriate

Q. On page 15, lines 4 - 11 of his Rebuttal Testimony, Mr. Turner recommends that all three ILECs in this case use the same cost inputs that he recommends for BellSouth. Is this appropriate?

A. No. The three ILECs in this case are vastly different in their size on a system wide basis and have different economies of scale for their central office switching centers within the state of Florida.

Q. How does the size of an ILEC on a system level influence its cost inputs?

A. Larger corporations have greater purchasing power than smaller ones due to the volume of their purchases.

Q. What impact do differing economies of scale in central office switching centers have on costs?

A. Larger switching centers lead to larger DC power plants which can be constructed at a much lower cost per amp than smaller DC power plants. This is evidenced by the relative comparison of DC power plant investment per amp on work paper 5.0 of Revised Exhibit JRD-2. Even though many of the components (rectifiers, batteries, etc) used to build the various sizes of DC power plants cost the same, combining these components into larger DC power plants lowers the cost per amp. In addition, larger central office switching centers require larger central office buildings which can also be built at a lower cost per square foot than smaller central office buildings. Mr. Turner alludes to his understanding of these principles on page 22, lines 23-26 of this Rebuttal Testimony as he compares the relative sizes of BellSouth and ALECs by mentioning the "economies which BellSouth enjoys".

Q. What evidence can you present to demonstrate size and economies of scale differences among the three ILECs?

A. The top portion of Exhibit JRD-4 is a comparison of the number of access lines each of three ILECs have in the state of Florida as well as throughout their multi-state operations. This exhibit clearly shows that although Verizon and Sprint's Florida operations are of a similar size, Verizon is more than 7 times the size of Sprint on a system wide level. Furthermore, BellSouth is roughly 3 times the size of Sprint, both within the state of Florida and on a system wide basis. Size at the system level is what determines purchasing power when it comes to buying the necessary goods and services to provide service. A company which is 3 to 7 times larger than another will certainly have more purchasing power. Exhibit

JRD - 4 also provides a comparison showing the number of central office switching centers by size for the three ILECs. This portion of the exhibit clearly shows that BellSouth has at least 26 central office switching centers that are larger than Sprint's largest central office switch. Furthermore, BellSouth has nearly 4 times as many central office switching centers in the range of 4,000 to 8,000 access lines which is representative of Sprint's largest central office switching centers. ILECs with larger central office switching centers are able to place larger quantities of DC power plant components at each location (batteries, rectifiers, etc.) to achieve greater economies of scale.

Q. Given the size differences in switching centers in Florida and overall lines served on a system-wide basis, does Sprint enjoy the same economies of scale as the other LECs in this case?

A No. Sprint does not enjoy the economies of scale of either BellSouth or Verizon. Because of less purchasing power, Sprint is not able to obtain equipment like DC power plant (batteries, rectifiers, power boards, generators, etc), DC power cable, and cross connect cable materials as cheaply as these larger ILECs. Furthermore, Sprint's central office switching centers are not as large as BellSouth (or Verizon) in the state of Florida and therefore cannot achieve the same efficiencies in DC power plant and central office building construction.

Mr. Turner's Recommended Cost Input for the AC Power Component of the DC Power Rate per Amp is Incorrect.

Q. What is the AC power component of the DC power rate?

A. As explained in my direct testimony for issue 6 (B), AC power is purchased from an electric utility then converted to DC power (by rectifiers) within the DC power plant. This issue was discussed extensively during the hearing on issues 1 through 8 for this case on August 11 and 12, 2003.

Q. What is Mr. Turner's recommendation concerning the cost of the AC component and on what does he base his recommendation?

A. On page 28 of his Rebuttal Testimony (beginning with line 19), Mr. Turner points to a U. S. Department of Energy report on AC power costs (Exhibit SET-5) and recommends $.053 per KWH as a cost input for AC power based on the 2002 actual revenue to electric utilities from consumers in the "Industrial" category for the state of Florida.

Q. What justification does Mr. Turner provide for his recommendation?

A. Mr. Turner relies on his own experience and states that he is "confident in this section" (page 29, line 1). He adds: "from experience I know that the incumbent LECs tend to have AC power rates that are most closely approximated by the rates in this column" (page 29, line 1). Later in the same paragraph he states that "The bottom line, however, is that I have used the industrial category for 2002 in identifying the appropriate AC kilowatt hour rate for BellSouth and the other incumbents" (page 20, lines 6-8).

Q. Is Mr. Turner's recommendation appropriate for Sprint?

A. No. This recommendation is inappropriate for some very compelling reasons. First, I consulted Ms. Charlene Harris-Russell with the US Department of Energy who was listed as a contact on the web site associated with the report represented by Exhibit SET-5 attached to Mr. Turner's testimony. According to Ms. Harris-Russell, a telephone company's switching center would typically come under the

commercial use category. This fact was confirmed by interview with Sprint's Energy Manager.

Q. What rate per amp corresponds to the commercial category according to the US Department of Energy?

A. As can be seen on Mr. Turner's Exhibit SET-5 attached to his Rebuttal Testimony, the actual revenue to electric utilities from users in the "Commercial" category for 2002 in the state of Florida is $ .067 per KWH.

Q. Has Sprint provided proof of its AC power costs?

A. Yes. As a matter of fact, it was AT&T who requested cost support for Sprint's AC cost input of $ 0.0671 per KWH. In response to AT&T's Request for Production of Documents Number 17 (provided March 14, 2003 more than a month before Mr. Turner's testimony was filed), Sprint provided AT&T with an analysis of actual electric bills (usage and cost) for the 12 month period from October, 2001 through September, 2002 for 445 meter locations throughout Sprint's territory in Florida amounting to more than 10,000 data points (445*2*12). It is obvious that Mr. Turner completely ignored the extensive factual data supplied by Sprint in response to AT&T's request. This cost analysis strongly supports Sprint's cost of $ 0.0671 per KWH which is identical to the U.S. Department of Energy's reported revenue of $ 0.067 per KWH for users under the "Commercial" classification for 2002.

Q. On page 29 of his Rebuttal Testimony, Mr. Turner makes mention of load sharing arrangements with AC power providers where ILECs provide their own AC power by running their generators periodically in exchange for a lower rate. Does Sprint have any such arrangements?

A. Yes. The savings resulting from these arrangements are reflected in Sprint's actual cost analysis provided in our Response to AT&T POD Number 19.

Sprint's Collocation Cost Model Provides Cost Recovery only if ALECs pay for the DC Power They Order

Q. On page 31 (lines 1-19) of his revised Rebuttal Testimony, Mr. Turner states that "While List 1 Drain is the current that the equipment draws when it is operating at normal voltages, the equipment will not always draw that current." Is this statement germane to DC power rate development?

A. No. Sprint's DC power rate is developed with the intention of having the ALEC pay for a share of the DC power plant base on the amount of DC power they order. The ALEC can base their DC power needs on any criteria they wish; however, the ALEC must pay for the DC power they order for Sprint to recover its cost.

Q. What are some of the key assumptions made by Sprint in its collocation cost model for the development of a DC power rate per amp?

A. Sprint's collocation cost model develops an investment cost per amp using the DC power plant's capacity to supply power. A DC power plant's capacity is defined by the number and size of rectifiers, batteries, power boards, generators, etc. which make up the DC power plant's infrastructure. By ordering DC power, the ALEC is telling Sprint how much of the DC power plant's capacity it wants to serve its collocated equipment. Although the Sprint incurs the cost of building the DC power plant up front, the investment cost per amp determined by Sprint's collocation cost model is used to develop a **monthly** recurring charge rather than

a **non-recurring** charge per amp of DC power ordered by the ALEC. This gives the ALEC the advantage of having no up front cost when placing an order for DC power amps.

Q. Also on page 31 (lines 23-24) of his revised Rebuttal Testimony, Mr. Turner discusses metering of actual usage. Is metering of actual usage taken into account in Sprint's collocation cost model?

A. No. As stated previously, the investment in the DC power plant and its capacity to provide DC power are variables used to determine the DC power rate per amp. If the Florida Commission were to order the metering of DC power, Sprint's DC power rate per amp would have to be adjusted upward to account for the gap between the DC power plant capacity ordered by the ALEC and the DC power actually used by the ALEC's equipment. Exhibit JRD-5 is a reproduction of attachment "Staff POD 62-C-3" which was included as part of Sprint's response to Staff's request for the Production of Documents Number 62. As can be seen from the exhibit, the ALECs represented are only using 13.7% of the DC power plant they ordered. Without an adjustment in the DC power rate per amp to account for the difference between what an ALEC orders verses what it uses, the ALEC will have no incentive to limit the DC power plant capacity it orders and Sprint would bear the cost of the DC power plant infrastructure ordered but unused by the ALEC. The over-ordering of DC power plant capacity will, as it has in the past, drive Sprint to overbuild DC power plant. It is important to both Sprint and the ALEC for the ALEC to order DC power in smaller increments with the intention of being proportionate with its collocated equipment's DC power needs.

Q. Why is it important to the ALEC to order an amount DC power which is proportionate with its equipment needs?

A. To save money. If they order less, they pay for less. This holds true for both the AC power component of the DC power rate as well as the component which recovers the DC power plant investment made by the ILEC. In addition, Sprint is willing to work with the ALECs on upsizing their DC power cables (while right-sizing their fuses) which feeds their collocated equipment offering even more savings on the NRCs related to installing DC power cable feeds.

Q. Why is it important to Sprint for the ALEC to order an amount DC power which is proportionate with their equipment needs?

A. DC power plant capacity of a particular Central Office should be planned from a community point of view. This means recognizing that Sprint and all the ALECs housed in a particular central office are competing for the same customers. If the DC power plant of a particular central office is shared properly, additions to DC power plants should be more limited to growth in services actually purchased by consumers rather than being driven by the over-ordering of DC power plant capacity by ALECs. To help ensure that DC power plants are shared between Sprint and the ALECs, the ALECs need to be given the financial incentives to order DC power in smaller increments. If ALECs order DC power in smaller increments, Sprint is given the opportunity to shift DC power plant capacity it no longer needs to the ALEC as the ALEC grows. Meanwhile if the ALEC decides to discontinue offering service, Sprint would not have to absorb the carrying cost associated with DC power plant additions, driven by ALECs' over-ordering of DC power. An ability to shift DC power plant capacity to whoever needs it as they need it would lessen the need to charge the ALEC with an expensive up front

investment per amp in the form of a non-recurring charge to enable Sprint to achieve full cost recovery of its DC power plant investment.

Q. Can Sprint present evidence that ALECs have discontinued their collocations after it has added capacity to DC power plants?

A. Yes. Exhibit JRD-6 is a list of ALECs that have discontinued service in 4 Sprint central offices. Also shown is the cost of DC power capacity added to these offices.

Q. How can the Florida Commission help to provide ALECs with the financial incentive to be more efficient by ordering an amount DC power which is proportionate with their equipment needs?

A. By reinforcing that an ALEC is to pay for all DC power amps ordered.

The Costs Included in Sprint's Rate Elements for AC Outlets and Overhead Lights Are Not Already Included in its Floor Space Rate Element

Q. On page 23 of his Rebuttal Testimony, Dr. Gabel states that "it appears that Sprint's building investment calculations already include the cost of permanent fixtures such as overhead lighting and AC receptacles." Is Dr. Gabel's comment correct?

A. No. Both the AC receptacles and overhead lighting collocation elements are only charged when applicable. As explained in Sprint's Response to Staff Interrogatory Number 30, R. S. Means does in fact account for the cost of AC outlets along the perimeter of a finished space (like along the permanent walls) but the R.S. Means construction cost estimator does not account for AC outlets that ALECs often add to their equipment bays which are located out in the middle

of the floor. In like manner, although R.S. Means does cover overhead lights, Sprint has found that ALECs sometimes want to add additional lighting. Sprint only charges for AC outlets and additional overhead lighting when ALECs request these elements and Sprint incurs the cost. As can be seen in Sprint's Response to Staff Interrogatory Number 1, ALECs do not always order these elements, in that only three of five collocators ordered an AC outlet(s) while none of the five collocators ordered additional overhead lights.

Sprint's Floor Space Rate Development is TELRIC compliant

Q. What key characteristics of Sprint's floor space rate development cause it to be TELRIC compliant?

A. Sprint's floor space rate development using R.S. Means is based on the forward looking cost (as opposed to embedded cost) of building a central office building on a scale which fits the total demand for space by both the ILEC and the ALECs sharing the space.

Q. How does the use of forward looking cost and the scale of total demand affect cost recovery?

A. By using forward looking cost on a scale of total demand, Sprint's floor space rate assumes that finished transmission space is available meaning that the cost for routine site preparations for items like ductwork and cable rack extensions for transmission space is accounted for. Therefore, unlike the other two ILECs in this proceeding, Sprint does not have a separate rate element for "space preparation" (e.g. BellSouth H1.41-H1.45) or "building modification" (e.g. Verizon element No. 34).

Q. What methodology for building floor space cost development does Staff witness Dr. Gabel advocate?

A. Staff witness Gabel endorses Verizon's indexing of embedded cost methodology.

Q. Do you consider Verizon's methodology to be TELRIC compliant?

A. No. Since embedded costs are being used, it is obviously not forward looking. Even Dr. Gabel himself states that "this approach is somewhat inconsistent with the FCC's pricing rules that require the use of forward –looking efficient technology" (Gabel Rebuttal, page 8, lines 7-9).

Q. Do you agree with Dr. Gabel's assertions that if embedded cost indexing is used, the inclusion of space preparation cost for ALECs in the building investment account negates the need for separate a rate element like BellSouth's "space preparation" MRCs or Verizon's "building modification" MRC?

A. No. Using embedded cost while assuming all collocation related modification costs are already accounted for would not fairly attribute the cost of preparing collocation space to the ALECs. The investment associated with space preparation for ALECs is very small compared to the investment cost of the entire building and would therefore not have a material affect on the overall investment cost per square foot. Under the Verizon methodology, ALECs should bear the full cost of space preparation since they are the cost causers. Otherwise, ALEC operations would be subsidized by the ILEC.

Q. On pages 28 of his Rebuttal Testimony, Dr. Gabel recommends that Sprint convert embedded building cost to current cost to duplicate the Verizon

methodology and to do so in central offices where collocation exists. Has Sprint performed such an analysis?

A. Yes, we have. Indexing the vintage data of the sample of offices shown on Exhibit JRD-7 yielded a cost of $227 which is higher than the cost derived from R.S. Means ($146 from lines 1 and 2 of Workpaper 4.0 of Revised Exhibit JRD-2). This sample of central offices is from the same random sample used to perform additional analysis on Sprint's floor space rate gross up factor discussed later in my Surrebuttal Testimony.

Q. What opinions are offered by ALEC and Staff witnesses concerning Sprint's use of R. S. Means?

A. AT&T witness Turner is a strong proponent of R.S. Means (Turner Rebuttal, page 45) while Staff witness Gabel is not. Mr. Turner speaks of R.S. Means as being an independent verifiable source (page 46, line 6) that "has been used by state Commissions and incumbents in developing investments for collocation". One such Commission, as Mr. Turner reports (page 46), is the Texas Public Utilities Commission. Dr. Gabel, on the other hand, criticizes R. S. Means while using a disclaimer statement from a product other than R. S. Means (page 28, lines 10-13)!! Witness Gabel's footnote number 28 on page 28 of his Rebuttal Testimony reveals that his quoted disclaimer statement actually comes from the "2000 National Construction Cost Estimator" not R.S. Means. The act of criticizing one product while using disclaimers from another constitutes an inappropriate use of unrelated facts. This is similar to attempting to discredit the reliability of a Toyota by quoting the repair occurrences of a Buick.

Q. If the Florida Commission were to adopt Verizon's methodology for floor space rate structure, what additional collocation elements would Sprint need to employ?

A. As can be seen from Sprint's Response to Staff's Interrogatory Number 54 and on the attached Exhibit JRD-3, Sprint's floor space rate element encompasses Verizon's elements of: floor space, building modification, environmental conditioning, and cage ground bar. These last 3 elements would need to be added to Sprint's collocation rate list.

Q. If the Florida Commission were to adopt Verizon's floor space rate, would Sprint double recover for security systems as Dr. Gabel asserts on page 44, lines 21-25?

A. No. Sprint charges security systems to the Furniture and Office Equipment Investment Account as opposed to the Building Investment Account; therefore, Sprint's security system investments added as a result of collocation are not contained in the vintage data for the Building Investment Account.

Gabel's Criticisms of Sprint's Floor Space Rate Development Contains Numerous Inaccuracies

Q. On page 9 of his Rebuttal Testimony, Dr. Gabel states that "if a new *central office* building were to be constructed, it might be smaller than today's central offices" (clarification added). What are reasons this would not be the case?

A. Dr. Gabel was making reference to the trend towards smaller switching equipment; however, that does not take into account the fact that additional space is needed to house the ever growing number of systems necessary to provide modern telecommunications including fiber systems, SS7 networks, digital cross connects, and ATM networks. Furthermore, collocation itself adds to the general requirements for space. However, even if newer central offices were smaller, their cost per square foot would be higher which would offset the effects of shorter cable runs.

Q. Should Sprint's actual measurements for DC power and cross connect cables be adjusted to reflect the assumption of a new building under R.S. Means as Dr. Gabel suggests (Gabel Rebuttal, page 10, lines 4-6)?

A. No. As just explained, Sprint does not see any valid reasons for why a new central office building housing telecommunications network equipment would be materially different in size as compared to an existing one. Furthermore, even if a new building would actually be built, collocation would fairly be spread throughout the central office as it is today. Sprint's Response to Staff Request for the Production of Documents Number 20 shows a wide range of cable lengths for both DC power feeds and cross connects clearly indicating that collocations are indeed spread throughout Sprint's central offices.

Q. On page 43, line 26 of his Rebuttal Testimony, Dr. Gabel comments that of the 48 observations Sprint used for its security additive, only 2 were in the state of Florida. Has Sprint since examined other security system costs in the state of Florida?

A. Yes we have. Exhibit JRD-8 provides a list of price quotes for security systems in central office buildings in the state of Florida. As can be seen the overall average investment per square foot for the Florida systems is $ 2.63 while the overall average investment per square for security systems used in Sprint's study is $2.92.

Q. Does this difference in cost have a material affect on Sprint's rate for floor space?

A. No. Since Sprint spreads the cost of the security system enhancement based on the total usable square footage in the central office, as advocated by Dr. Gabel on page 43 of his Rebuttal Testimony, the security additive accounts for less than 2 percent of Sprint's floor space rate. The difference of $ .29 per square foot between the Florida specific security systems versus the security systems used in the study accounts for a difference of less than 2 tenths of one percent (0.2%) in Sprint's floor space rate.

Q. On page 44, line 15, Dr. Gabel reported that Sprint's cost per square foot for the security additive is $ .70 compared to $ 0.0125 for BellSouth. In his footnote 49 at the bottom of the page, he says that he arrived at his figure by taking Sprint's additive for security and applying Sprint's annual charge factor. Are Dr. Gabel's calculations correct?

A. No. As their name implies, annual charge factors are used to calculate annual charges. To arrive at a monthly recurring charge, the analyst must divide the annual charge by twelve, which Dr. Gabel did not do. Dr. Gabel should have reported $0.70 divided by 12 or $ 0.058 per square foot compared to Bell's $0.0125 per square foot.

Q. Can the difference between Sprint's and BellSouth's cost per square foot for security systems be explained?

A. Certainly. If you take BellSouth's MRC cost and back into an investment per square foot using BellSouth's ACF for buildings, you arrive at $ .77 per square foot (.0125 / .1936 * 12 months per year). The average security investment per square foot in Sprint's larger buildings is comparable to BellSouth's cost. As shown on Exhibit JRD-4, BellSouth has much larger central office switching centers/buildings than Sprint. Sprint simply does not have the same economies of scale as does BellSouth.

Q. What questionable comments does Dr. Gabel make concerning floor space lease costs?

A. Dr. Gabel cites comments from a North Carolina proceeding making reference to an anomalously low historic floor space lease costs. What Dr. Gabel does not mention however, is that three of the five leases cited are from extremely small towns (two of which have populations of less than 300 people) and involve 30 year old leases with little to no provisions for inflationary increases. One other lease was for a small remote switch at a strip shopping center. None of these four locations had any collocation in them nor likely ever will. These buildings and leases are hardly comparable with the larger towns and the value of property in Florida. It should be noted that Sprint does not lease space in Florida for central office equipment buildings (see Sprint's Response to Staff's Interrogatory Number 25).

Q. On page 24 of his Rebuttal Testimony, Dr. Gabel expresses concern over the statistical validity of Sprint's sample of five sets of floor plans for its central

office buildings in evaluating its floor space gross up factor. Why did Sprint use five?

A. As covered in our Response to Staff's POD Number 13, Sprint's selection of five central offices was based on the need to work with a manageable number of offices to analyze given the labor intensive nature of this study.

Q. Has Sprint examined additional floor space plans since the filing of its study in February?

A. Yes. Sprint has added a random selection of 14 additional central office buildings containing collocation for a total of 19. As shown on Exhibit JRD–7, this is now a statistically valid sample of Sprint's central offices.

Q. On page 27 of his Rebuttal Testimony, Dr. Gabel's footnote number 27 asserts that "49 of Sprint's 134 COs (roughly 37%) are at or near capacity". Is this assertion true?

A. No. Dr. Gabel referenced Sprint's web site containing information on full site locations. Dr. Gabel assumed that all 49 sites listed are central offices, while at the time of the study only one of these sites was a central office with the remaining 48 closed sites were digital line carrier systems.

Q. Is this one closed office included in your random sample of central office buildings?

A. Yes.

Q. What incorrect assumptions has Dr. Gabel made about Sprint allocation of egress space its floor space factor?

A. Dr. Gabel failed to recognize that Sprint's inclusion of egress (labeled "E" as shown in column "h" of Exhibit JRD–7) only includes the egress contained within the equipment transmission room. The egress used by Sprint in its calculation of

the floor space rate consists of the aisles on either end of the rows of equipment bays along with space which allows access to caged collocation. Without this aisle space, the collocation is unusable because a technician would not place or access equipment. It would therefore be inappropriate to spread Sprint's egress space to any other elements.

Q. How did Sprint determine shared and growth space for its floor space rate calculation?

A. For shared space (labeled "S" in column "f" of Exhibit JRD-7), Sprint excluded space (stairways, halls, equipment staging areas, bathrooms, and break rooms) that would not be used by the ALEC. For growth space (labeled "G" in column "g" of Exhibit JRD-7), Sprint only counted space that is available for both Sprint and the ALECs to occupy as equipment space. Sprint bears the full cost of all this space; therefore, ALECs should bear a fair share of this cost. This can only be accomplished by allocating shared, growth and egress space to only transmission space.

Q. In footnote number 26 on page 27 of his Rebuttal Testimony, witness Gabel claims that Sprint included "office space" as shared space in it's Winter Park Central Office Building. Is this true?

A. No. The space Dr. Gabel is referring to is obviously a hallway which leads to a transmission space shared by Sprint and the ALECs. After consulting with building engineering, this space was appropriately and clearly relabeled "HALL" on the drawing and used as shared space in our analysis.

Q. What is Sprint's space allocation for Air Conditioning?

A. The space identified for Air Conditioning Equipment (column "k" of Exhibit JRD–7), is for space containing the central office's heating and cooling system (HVAC).

Q. In its original study, why did Sprint allocate all of its AC equipment space to transmission space?

A. According to Sprint's facility engineers, more than half of the cooling capacity of a central office building is needed to cool the equipment in the building as opposed to the building itself if it were empty. Nonetheless in retrospect, some of the AC equipment space allocated by Sprint to the transmission space could have been allocated to office and power space (vaults are generally not cooled). Sprint's desire is to recover only its cost; therefore, Sprint has made adjustments to reflect the sharing of AC space (labeled "A" in column "l" of Exhibit JRD–7), to more than just transmission space in its recalculation of its floor space gross up factor which is covered below.

Q. How did Sprint allocate AC equipment space in its recalculation of the gross up factor?

A. As can be seen in columns "d", "j", and "l" of Exhibit JRD-9, Sprint allocated the AC equipment space based on the square footage of all identified space in the building excluding unconditioned spaced (e.g. cable vaults).

Q. What floor space gross up factor is supported by Sprint's additional data coupled with the adjustment in how AC space is allocated?

A. As can be seen from the results of Exhibit JRD-7, Sprint's revised gross up factor is 49.2 %. This higher factor, when combined with the small reduction in Sprint's security additive discussed previously, results in a revised floor space rate of

$7.87 per square foot per month (see Revised Exhibit JRD–2). Sprint's floor space rate in its original filing on February 4th, 2003 was $9.65.

Gabel Mischaracterizes Sprint's Presentation of its Forward Looking Costs

Q. On page 32 of his Rebuttal Testimony, as part of his comments on the reliance of SME inputs, Dr. Gabel comments that the "incumbent LECs have greater access to the cost information necessary to calculate the incremental cost of unbundled elements in the network" and "incumbent LECs must prove to the state commission the nature and magnitude of any forward-looking cost that it seeks to recover in the prices of interconnection and unbundled network elements". Has Sprint presented its forward looking cost in this proceeding?

A. Yes. As covered in Sprint's Response to Staff's Interrogatory Number 15, 90% of the first year collocation costs are supported by either actual cost analysis or forward looking vendor quotes while 99% of the ongoing monthly recurring charges are supported by actual cost analysis or forward looking vendor quotes.

Q. What comments has Dr. Gabel made concerning Sprint's actual cost derivations through work order analysis and vendor quotes?

A. On page 37, Dr. Gabel acknowledges that Sprint has substantially supported its rates through actual cost (through work order analysis) or vendor quotes; however, he still expresses a preference towards Verizon's lower work times. In fact, throughout his "analysis" Dr. Gabel simply picks the lowest number without regard as to whether or not the low number is accurate. This is the case for DSO cross connect cable pulls (page 50 of Gabel's Rebuttal). Dr. Gabel prefers

Verizon's lower work time for cable pulls and terminations which are supported by SME inputs to Sprint's work time for cable installations which are based on work order analysis. Even though he otherwise is critical of SME inputs, he does not introduce the possibility that Verizon's SME based work times are understated. Another possibility is that Verizon's SME based work times represent a best case scenario involving comparatively easy installations of a relatively large number of DS0s installed per job. Of the 75 work orders examined by Sprint in determining the actual work times for cross connects, only 6 involved installations of more than 2,000 DS0s while 4 of 5 collocations included by Verizon in its Response to Staff's Interrogatory to Verizon No. 1, involved installations of more than 2,000 DSOs. Sprint's work times for cross connect cable installations reflect the quantities typically installed by Sprint as well as the realities of the difficulties of doing this type of work.

Q. Where else did Dr. Gabel simply pick the lowest work time input without regard to its accuracy?

A. Although Sprint and BellSouth's collocation application fees are similar ($2,758 and $2,785 respectively), on page 39 of his Rebuttal Testimony, Dr. Gabel recommends that both Sprint and BellSouth use Verizon's work times for its Application Fee. In this situation, Verizon is clearly the outlier, but Dr. Gabel disregards the possibility that Verizon has omitted some costs they are entitled to or is recovering some of their application related costs in some other way. He simply picks the Verizon rate because it is the lowest number.

Q. Given that ILECs appear to recover certain costs under different rate elements, how can comparisons of collocation cost structures be made in a fair and equitable manner?

A. Through a NPV analysis of a typical collocation (see Exhibit JRD-3). Staff has facilitated this type of comparison by asking each ILEC to select applicable collocation elements for specific examples of collocations provided by each ILEC under Staff's first set of interrogatories. Such an NPV analysis enables an overall comparison of costs regardless of what elements ILECs choose to incorporate specific costs.

Q. Is Dr. Gabel consistent in his treatment of outliers?

A. No. Dr. Gabel later criticizes Verizon's much higher work time for their Space Availability Report (page 48 of Gabel's Rebuttal) seemingly treating Verizon as the outlier as compared to Sprint and BellSouth who again have similar but much lower costs based on 14 hours and 10 hours respectively. However, as can be seen from the previous discussion on collocation application fees, the lowest number always gets picked.

Q. What recommendation does Dr. Gabel give regarding Sprint's Space Availability Report?

A. Dr. Gabel recommends that Sprint reduce the work time for its Space Availability Report from 14 hours to 10 (to match BellSouth) simply because BellSouth has the lowest number. Dr. Gabel does not appear to take into account that Sprint has no experience providing space reports in Florida (see Sprint's Response to Staff's POD Number 16) nor does he acknowledge that services so rarely provided take extra time due to a lack of familiarity by the individuals performing the work.

Dr. Gabel Has Mischaracterized Sprint's SME Inputs

Q. On page 31, line 8 of his Rebuttal Testimony, Dr. Gabel states that "loaded labor rates are often calculated using time estimates provided by SMEs". Is this a true characterization?

A. No. Loaded labor rates are derived using actual expense dollars and actual time reported as opposed to SME estimates of work times.

Q. On page 36 of his Rebuttal Testimony, Dr. Gabel states that he believes that a form provided to Sprint's SMEs was pre-populated with time estimates and probabilities. What form is Dr. Gabel referring to?

A. The form Dr. Gabel is referring to is a work paper Sprint provided in Response to Staff's POD Number 12. This responsive document provided instructions to SMEs providing input for Sprint's collocation cost study for application and project management fees (one of the few areas of cost where Sprint relied on SME inputs). According to Dr. Gabel, Sprint was the only ILEC who provided such workpapers.

Q. Was the work paper pre-populated with recommendations from Sprint Cost Analysts as Dr. Gabel believes it was?

A. No, of course not. The responses shown were provided by the SMEs.

Q. On pages 39 and 40 of his Rebuttal Testimony, Dr. Gabel discusses the need to separate pre-acceptance (application) fees from post acceptance (FOC) fees because such a separation best matches the timing of when costs occur. Do Sprint's Application, Engineering, and Project Management Fees properly reflect pre and post acceptance cost?

A. Yes. Sprint's "New Collocation - Application Fee" (see line 1 on page 5 of Davis Revised Exhibit JRD-2), "Minor Augment Fee", and "Major Augment Fee" are for tasks which must be accomplished as part of assessing an ALEC's request for collocation and providing a quote. Once a firm order commitment is made, Sprint's fees for Transmission Engineering and Project Management apply as they are associated with the design and build out of the collocation.

Sprint's Cage Construction Cost Analysis

Q. On page 45 of his Rebuttal Testimony, Dr. Gabel makes a comment that Sprint studied nine work activities to estimate the per linear foot cost of collocation cages and their related engineering costs. Why did Sprint base its study on nine?

A. Nine is all Sprint's engineers could find where cage cost could be identified. It is important to note that, according to Sprint's collocation project manager, Sprint has only built 29 collocation cages in Florida. Fourteen of those were built under the nine work activities used in Sprint's study; therefore, the sample of nine work activities represents about half of the population being studied. Given that, Sprint believes its sample is representative of the cost of collocation cages.

Q. On page 46 of his Rebuttal Testimony, Dr. Gabel comments on the variance in engineering time reported for Sprint's work activities citing 34 hours for one job and only 4 hours for another. What is causing this difference?

A. Multiple field visits. The Sprint engineer reporting 34 hours was on a very tight time frame and had to watch the construction of the cage/collo space very closely to ensure the schedule was met and that the job was completed without mistakes.

This necessitated 3 trips to the field involving a city other than where the engineer's office is located for pre-construction, mid-construction, and final inspection.

Q. How does Sprint break out the average of 11.375 hours of engineering time per job into cage, AC outlets and overhead lights?

A. The engineers did not report time for cages, AC outlets and overhead lights separately; therefore, Sprint had to ask for their assistance in identifying time spent for each of these activities. Based on their input, the 11 total hours were separated into 8 hours for cage, 1.5 hours for AC outlets and 1.5 hours for overhead lights. Since these are actual collocations, they are representative of future requirements.

Q. Do all collocation cages require grounding?

A. Yes. All collocation cages are to be connected to the central office grounding field. This is not the same activity as providing a ground bar for collocators to connect their equipment to.

Sprint's DC Power Engineers Design the DC Power Plant

Q. On page 24 of his Rebuttal Testimony, Staff witness Curry states that he believes Sprint's work times for company engineering associated with new DC power plant construction appears high "especially when the actual power plant engineering has already been included as a contract expense". What role does a Sprint Power Engineer play in DC Power Plant design?

A. This was addressed in Sprint's Response to Staff's Interrogatory Number 40 where Sprint was asked about the activities of the Sprint Power Engineer with

respect to provisioning the EF&I of a power plant project. Listed among the activities is "determine exact specifications for power plant components and write request for proposal for submission to contractor". The next item on the list is "review contractor proposal, including communication with contractor about questions or changes to proposal". These work steps demonstrate that the Sprint Power Engineer is integral in the process for DC power plant design.

Q. Why is it important for a Sprint Power Engineer to be involved in DC power plant design?

A. A DC power plant is a major investment. It is in Sprint's (and the ALEC's) best interest to ensure that a vendor does not oversize expensive components of a DC power plant like rectifiers and battery strings. Furthermore, as can be seen from the activity list included with Sprint's Response to Staff's Interrogatory Number 40, the Sprint DC Power Engineer is also responsible for creating a "power demand forecast" and determining the "current and future capacity and space requirements based on demand forecasts". Time for site visits to check the progress of the project is also included. As represented in the cost study, the cost of the Sprint DC Power Engineer on average is only 1% of the overall cost of the DC Power Plant Investment. Sprint believes this expenditure is well worth it.

Sprint's DC Power Cable Cost Comparison

Q. On page 24 of his Rebuttal Testimony, Mr. Curry comments on Sprint's DC power cable cost and provides a comparison of material cost per foot on a chart entitled "Comparison of Power Cable Material Cost, per foot" between

Sprint, R.S. Means, Southwire (a supplier) and for Verizon (for 750 MCM).

Have you reviewed Mr. Curry's chart for accuracy?

A. Yes. The costs Mr. Curry provides in his table from R. S. Means and from "Southwire" are for cable types that are not appropriate for DC power applications associated with telecommunications.

Q. What type of cable has Mr. Curry identified?

A. The cable costs included in the chart for R.S. Means are 600 volt, type THW copper cable which is an industrial grade Class B building wire applicable for AC power applications. The R.S. Means Engineering group confirmed that they do not develop costs for telecommunications DC power cable. Likewise, Sprint's material management group also spoke with Southwire Corporation and confirmed that they do not provide a DC Power Cable which meets telecommunications specifications. The cable prices shown in the chart for Southwire are for a medium voltage, industrial grade Class B power cable termed Thermoplastic insulation/Nylon Sheath (THHN) which includes up to 61 individual wires. This 600 Volt copper wire does not meet telecommunications standards.

Q. What is unique about telecommunications power cables?

A. Telecommunications power cables must meet strict standards. The specifications are outlined in Telcordia Technologies CR-347-CORE, Issue 2 dated June, 2002 titled "Generic Requirements for Telecommunications Power Cable". The required cable is a "Class I" type product which includes up to 1221 individual flexible wires. This large number of individual wires is essential for the required flexibility involved in routing cable turns along the cable rack. Compared to the AC cable referenced above, the Class I product would be much easier to

maneuver through the cable rack which often involves very tight turns. Conversely, the extra stiffness associated with AC power cable would make it more difficult to install, resulting in longer work times. Telecommunications cable must also be insulated with low smoke, zero halogen (LSZH) very tough polyolefin materials that are heat-resistant, moisture-resistant and flame-retardant. Halogen is an element or compound which forms a salt by direct union with a metal which leads to corrosion. Class I (DC) power cable for telecommunications costs more to manufacture because of the additional strands, flexibility and protection.

Q. Does Sprint's pricing include overhead costs not taken into account by Mr. Curry?

A. Yes. Sprint's pricing for 250 MCM and 750 MCM cables includes all overheads associated with material handling (cutting and preparing for shipment), sales taxes, and shipping cost as well as all overhead loadings associated with work order activities (around 30% all totaled). Sprint's pricing for 1/0 and 4/0 cables includes material handling (cutting and preparing for shipment). The Southwire, R.S. Means and Verizon prices in Mr. Curry's chart also do not include any of these costs.

Q. What comparisons should be made between Sprint's material cost for DC power cable and Verizon's?

A. Sprint's costs represent the purchasing power of 8 million access lines system-wide as opposed to Verizon's 58 million (see Exhibit JRD-4). The costs borne by ALECs in Sprint central offices are very small compared to the expense of Sprint's operations; therefore, it is in Sprint's best interest to purchase goods and services in a cost efficient manner.

Clarifications on Sprint's Ground Bar Investment Cost

Q. On page 25 of his Rebuttal Testimony, Mr. Curry discusses Sprint's ground bar cost which is included in its floor space rate calling it "excessive". What clarifications are necessary concerning Sprint's ground bar cost?

A. Mr. Curry apparently missed the footnote on Workpaper 4.4 of Exhibit JRD-2 showing that Sprint's ground bar investment cost is intended to serve 400 square feet. Sprint's ground bar cost plus engineering divided by 400 square feet results in an average investment of $10 per square feet of floor space. The portion of Sprint's proposed floor space MRC represented by the ground bar is $.23 per square foot per month ($10 * building ACF of 24.31% divided by 12 plus common cost of 13.68%). Given that the current average size of a collocation in Sprint central offices is 58.9 square feet, ALECs on average would bear a $589 investment for access to a ground bar through an incremental MRC of $ 13.55 per month. Sprint sees a strong trend towards cageless collocation. Since an equipment bay takes up 10 square feet, ALECs bear only a $100 investment for access to a ground bar for each bay of equipment. Therefore for cageless collocation, ALECs would be paying $2.30 per month per equipment bay for access to a ground bar.

Q. Did Sprint obtain additional quotes on ground bar installations as suggested by Mr. Curry?

A. Yes. As can be seen by examining the cost quotes included as Exhibit JRD-10, the costs are comparable to the costs included in Sprint's floor space rate calculation.

Conclusion

Q. What conclusions do you wish to make concerning your comments on Mr. Turner's Rebuttal Testimony?

A. The use of NPV comparisons is a simple way to compare costs between ILECs using different cost structures. Furthermore, BellSouth's model will not meet Sprint's needs for cost recovery. Sprint's collocation rate elements are complete and are representative of the collocation elements ordered from Sprint. Collocation is very risky compared to UNE loops and should have cost inputs which differ from UNE loops. Sprint does not enjoy the same purchasing power or economies of scale that either BellSouth or Verizon enjoys. As evidenced by his recommendation for the cost of the AC component of the DC power, Mr. Turner did not consider Sprint's actual cost analysis in his review. Sprint's collocation cost model provides for cost recovery only if ALECs pay for the DC Power they order. By ordering a quantity of power, the ALEC is telling the ILEC how much power they want to be made available their equipment. An ALEC ordering power is equivalent to an ILEC building a power plant. The ILEC bears the cost of the DC power plant once it is constructed regardless of how much power is actually used. In like manner the ALEC should bear the cost of the DC power they order. Unlike the ILEC, the ALEC does have the advantage of paying for their DC power through a monthly recurring charge. An ALEC will save money if they order an amount of DC power which is proportionate with the needs for their equipment. Furthermore, ALECs ordering DC power in smaller quantities will lessen the need for DC power plant additions because DC power can be shifted from the ILEC to the ALEC as their needs grow.

Q. What conclusions do you wish to make concerning your comments on Dr. Gabel's Rebuttal Testimony?

A. Dr. Gabel makes a series of misrepresentations of Sprint's actual cost and cost analysis while systematically simply zeroing in on the lowest cost of the three ILECs. Like Mr. Turner, Dr. Gabel does not credit Sprint with supporting its cost through actual cost analysis and does not acknowledge that Sprint does not have the same purchasing power or economies of scale of either BellSouth or Verizon.

Q. What conclusions do you wish to make concerning your comments on Mr. Curry's Rebuttal Testimony?

A. Sprint has the responsibility and the economic incentive to design its own DC power plants and to purchase goods and services (e.g. DC power cable) as cost efficiently as possible. The cost savings attributed to Sprint's own operations as a result of its actions are far more significant than the cost Sprint incurs and recovers from ALECs.

Q. Does this conclude you Surrebuttal Testimony?

A. Yes.