Exhibit No._____ (JH-1T)
Docket No. UT-003013

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

IN THE MATTER OF THE CONTINUED	)	
COSTING AND PRICING PROCEEDING	)	
FOR INTERCONNECTION, UNBUNDLED	)	**DOCKET NO. UT- 003013**
ELEMENTS, TRANSPORT AND	)	
TERMINATION, AND RESALE	)	

DIRECT TESTIMONY OF

JERRY HOLLAND
DIRECTOR – SERVICE FULFILLMENT

ON BEHALF OF

GTE NORTHWEST, INC.

SUBJECT: DESCRIPTION OF OSS PROJECTS

MAY 19, 2000

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I INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jerome Holland, and my business address is 545 E. John Carpenter Fwy., Irving, Texas.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by GTE Service Corporation as Director – Service Fulfillment and representing GTE Northwest Incorporated ("GTE") in this proceeding.

Q. WHAT ARE THE RESPONSIBILITIES OF YOUR CURRENT POSITION?

A. My principal duties include the development, direction and supervision of the functions required to monitor Operations Support Systems ("OSS") performance. This responsibility is a recent change. I previously held the position of Director–OSS Program Management from January 1998 to October 1999. My responsibilities in that position included the development, direction and supervision of the functions required to provide open access to competitive local exchange carriers ("CLECs"). These duties included the development, deployment, administration, and enhancement of OSS used to support CLEC requests.

Q. PLEASE BRIEFLY OUTLINE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY.

A. I graduated from the West Virginia Institute of Technology, Montgomery, West Virginia with a Bachelor of Science in Electronic Engineering Technology in 1987. I subsequently received a Masters of Business Administration from Indiana Wesleyan University, Marion, Indiana in 1994. Since joining Contel of Virginia in 1987, I have held a number of positions of increasing responsibility with Contel and then GTE companies, including assignments pertaining to billing systems, facility management, access ordering and technical support, and unbundled network element processes and deployment.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY OTHER REGULATORY COMMISSIONS?

A. Yes, I have testified in several states as an OSS subject matter expert.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe GTE's OSS and the projects it has taken to provide CLECs access to them in compliance with Federal Communications Commission (FCC) rules and orders ("OSS transition costs") issued to implement the Telecommunications Act of 1996 ("the Act"). I present GTE's position on what OSS costs should be recovered. I will identify what was required for GTE to implement

OSS functionality via these completed projects. I will then describe the functionality that each project provides and an explanation of how that functionality benefits CLECs and not GTE. Finally, I will describe why projects are prudent and reasonable, thus enabling CLECs in Washington to obtain wholesale services in a timely and efficient manner.

Q. ARE OTHER GTE WITNESSES PRESENTING TESTIMONY CONCERNING OSS?

A. Yes. GTE witness Terri Maria describes GTE's identification, quantification and tracking of OSS transition costs and its allocation of these costs to specific state jurisdictions, including Washington. GTE witness Linda Casey sponsors the OSS cost study GTE is submitting in this docket. She also presents the trend analysis that the Commission requested.

II. OSS TRANSITION COST RECOVERY CRITERIA

Q. WHAT CRITERIA DID GTE USE WHEN DETERMINING WHETHER TO SEEK COST RECOVERY FOR OSS PROJECTS IN THIS DOCKET?

A. GTE's criteria are:

- Completed projects or in-progress projects scheduled to be completed in 2000 (excluding cancelled and unscheduled projects);
- One-time expenses incurred in response to regulatory requirements to develop and implement OSS changes for use by CLECs;
- Costs are prudent and reasonable;
- Costs that are not linked to specific "demand-driven" activity but generally benefit all CLECs; and
- Costs that are not included in either recurring or non-recurring cost studies; and

Examples that meet these criteria include: 1) the costs of purchasing, creating or modifying network or systems capabilities and product offerings to comply with the FCC rules and orders; and 2) developing or revising processes and methods and procedures needed to comply with the rules and orders.

Q. WHAT FCC ORDERS PROMPTED GTE TO IMPLEMENT OSS INTERFACE SYSTEMS?

A. Because GTE operates as an incumbent local exchange carrier ("ILEC") in 28 states, GTE's OSS interface systems were designed and implemented primarily to comply with the provisions of the FCC's rules implementing the requirements of the Act. In its initial set of rules, the FCC determined that "an Incumbent Local Exchange Carrier

(ILEC) must provide non-discriminatory access to its Operations Support Systems (OSS) functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing available to the ILEC itself.[1]

Q. DOES ONE TYPE OF OSS FUNCTIONAL INTERFACE ADDRESS THE NEEDS OF ALL CLECS?

A. No. GTE offers various OSS solutions to meet the specific needs and capabilities of the CLECs. There are three general types of CLECs requiring interface access capabilities with GTE's OSS:

- Large (Tier 1) CLECs generally have resources available to build their own customized systems. Most of these CLECs have developed systems capable of electronically formatting data elements and are currently using GTE's Network Data Mover ("NDM") processes.
- Medium-sized (Tier 2) CLECs generally do not have the resources available to develop their own systems. Most of these CLECs have, however, developed systems capable of auto faxing orders to GTE or using GTE's Graphical User Interface (GUI) which offers Internet access.

[1] In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, "First Report and Order," FCC 96-325.

- Small (Tier 3) CLECs generally have little or no resources available to develop their own systems. Most of these manually fax the information to GTE.

Q. CAN YOU DESCRIBE WHAT CLEC SERVICES IS BENEFITED BY GTE'S OSS PROJECTS?

A. Not precisely, for several reasons. First, the system improvements implemented by GTE affect processes, not services, and these processes (pre-ordering, ordering, repair and billing) affect all wholesale products and services that GTE provides to its CLEC customers. Therefore, in a very general sense, these processes affect all of the resale services GTE provides and all of the UNEs GTE provides.

Q. DID GTE NORTHWEST BENEFIT BY THESE SYSTEM IMPROVEMENTS?

A. In general, GTE's retail operations did not benefit from these changes, and I address this issue on a project-specific basis throughout my testimony.

III. GTE'S APPROACH TO SYSTEMS DEVELOPMENT

Q. HOW DID GTE DECIDE WHAT PROJECTS TO UNDERTAKE TO IMPLEMENT ITS OSS INTERFACES AND SYSTEMS?

A. GTE made several decisions concerning how to provide the interfaces and systems needed to provide access to its OSS. The most important decision GTE had to make focused on whether to "build" or "buy" the software required. When GTE was first required to provide OSS access, no commercially available solutions were available. Therefore, with very few exceptions (which are addressed later in my testimony), GTE used its internal resources to develop the software solutions required.

Q. HOW DID GTE GO ABOUT DEVELOPING THE SOFTWARE SOLUTIONS?

A. When the Act was signed in February 1996, it was evident that GTE's internal processes and systems would have to undergo fundamental change in order to accommodate the new requirement. Further detail on the scope of these changes came out when the FCC's First Report and Order was issued in August 1996. The FCC required ILECs to provide CLECs with non-discriminatory access to OSS by January 1, 1997. The scope of work required to make the required changes and still meet this deadline required a substantial amount of time, energy and resources. Typical business-as-usual software development timeframes would ordinarily require approximately 18 months for a project of such magnitude, and therefore business-as-usual solutions would not suffice. Therefore, GTE turned to its internal Information Technology (IT) organization.

Q. PLEASE DESCRIBE THE IT GROUP.

A. GTE's IT group is GTE Data Services ("GTEDS"). GTEDS was founded in 1967 because data processing costs were growing at a very rapid rate, and GTE saw the benefits to be achieved by centralizing its telephone data processing into one organization. This enabled GTE to develop a professional staff dedicated to the IT discipline. Headquartered in Temple Terrace, Florida, GTEDS has over 6,300 employees in five major locations throughout the United States. GTEDS offers two classes of services within the data processing industry: (1) computer processing, and (2) professional services for information systems and management.

GTEDS provides computer processing through the establishment and/or operation of a network of data centers to provide for the computer service demands of the GTE Operating Companies ("GTOCs"). GTEDS engineers the physical computer resources into a highly efficient network that processes the data and satisfactorily meets the computer processing business information requirements of the GTOCs.

GTEDS provides professional services through a centralized staff of information management and systems and programming professionals to service telephone operations. This centralized staff of approximately 3,500 professionals develops, maintains and enhances the application programs necessary to the business operations of the GTOCs. The maintenance of a large staff provides a technical career path for

IT professionals, which enables GTEDS to attract and retain some of the top technicians in the country.

GTEDS provides data processing services both internally to other GTE companies as well as commercially to non-GTE customers. It currently provides services to a wide range of businesses throughout the United States and in ten other countries.

Q. WHAT QUALIFICATIONS DID THE IT ORGANIZATION BRING TO THE TASK OF COMPLYING WITH REGULATORY RULES AND ORDERS CONCERNING OSS?

A. In addition to being an industry leader in data processing, IT has been recognized as extremely cost effective and efficient in developing innovative software solutions. Recently, the Gartner Group, an internationally respected consulting firm specializing in computing solutions, ranked GTE's IT organization as the most cost-efficient data-processing center across all industries in 1998. In the Gartner Group's study, IT was compared to similar sized data processing firms running similar types and amounts of work in similar environments. The typical data-processing center spends one dollar to produce a standard unit of work. Gartner Group places the best performers into a group called the Best Standard of Efficiency ("BSE") group. The average company in this BSE group spends 61 cents to complete the standard unit of work. The Gartner Group found that GTE was completing the standard unit of work

for only 51 cents, making it number one in the BSE group. Reviews such as this bolster our view that utilizing IT was the most cost-effective option available to us.

Q. WHAT OTHER INTERNAL RESOURCES WERE AVAILABLE?

A. IT was also able to very effectively draw on the research and development work already done by other GTE affiliates, such as GTE Laboratories (GTE Labs) and GTE Government Systems, in order to provide the necessary technology solutions. GTE Labs was able to provide not only substantial programming resources, but also the benefits of research and development work and the use of new technologies needed to develop an end-to-end solution to the business needs. GTE Labs had for many years been actively involved in a consortium of industry leaders developing new technologies and the standards required to bring those technologies into business use, and as a result was "ahead of the curve" in being able to apply these developing technologies to the requirements of the Act.

Q. HOW DID GTE MANAGE THIS DEVELOPMENT PROCESS?

A. Every decision was carefully evaluated by balancing functionality with the cost to deploy. In 1995, a group was initially formed to begin preparing for the opening of GTE's local network for competition. Early decisions concerning system development were made within this organization. In December of 1997, a decision to staff a new organization to manage the OSS development was made and I was chosen

to the lead the group. It was named the "Open Market Transition" ("OMT") "Program Management Office" ("PMO"). As the director of this group, I was responsible for managing all aspects of the transition to a competitive local exchange environment, including to provide oversight for the decision making process on all aspects of software development and enhancement. The PMO consisted of 14 persons drawn from all affected departments within GTE. Within the group there were five project managers who centered on Pre-Ordering/Ordering, Repair/Maintenance, Billing, Unbundled Network Elements ("UNE") and CLEC Performance Measures. In October of 1999, the group had completed the task assigned and was disbanded. At that time, the functions provided by the PMO were transitioned back to the individual departments from which they originally came.

Q. WHAT PROCESS DID THE PMO USE TO CONTROL COSTS ON A PROJECT BASIS?

A. Work performed by IT was handled through an internal Authorization to Proceed (ATP) process that GTE began using in early 1996. This process was initiated by a change request from the PMO that specified the "high level" business needs. This generated an initial estimate from IT, which was then returned to the PMO for review and further modification. Based on the IT estimate, the PMO, with input from the business process owner, made a decision to cancel or proceed to the next step. If the project proceeded to the next step, a detailed business requirements document was

created and submitted to IT. Once received by IT, a refined estimate was generated. Again, the PMO with help from the business owner would make a decision to either proceed with the project or cancel it. If the decision were to proceed, IT would be authorized to begin developing the software required. The end result of this iterative process was a clear statement of work and an estimation process that had gone through several steps of refinement and attention to cost control.

Q. WHAT APPROACH DID THE PMO TAKE IN CREATING THE NECESSARY INTERFACES?

A. Almost without exception, the PMO chose to enhance existing software interfaces and computer systems in order to keep development and implementation costs as low as possible without giving up valuable functionality required by the CLECs. A good example was the first ordering interface developed by GTE in response to the FCC order. This interface centered on the Fast Connect or Network Data Mover (NDM) mainframe computer connection that was already in place with large interexchange carriers. NDM is an industry-accepted method of electronically transferring large data files such as Carrier Access Bills and Access Service Requests. By enhancing these existing interfaces to process wholesale orders, GTE was able to lower both the cost of development incurred by GTE as well as the implementation or connection cost to large interexchange carriers seeking to enter the local market.

Another example concerns billing. Instead of developing a costly new billing platform (with cost estimates as high as $15 million), GTE chose to enhance the current retail platform for application to resale and UNEs, a far less expensive option. By using this approach to decision making, GTE has consistently maintained control over its expenditures and achieved significant cost savings as a result. The process used is a prudent means of controlling costs.

IV. GTE'S OSS TRANSITION COSTS

Q. HOW WERE GTE'S OSS PROJECTS CATEGORIZED?

A. GTE's OSS projects were categorized based primarily on the four major OSS processing functions the ILECs were ordered to provide to CLECs on a non-discriminatory basis: 1) pre-ordering, 2) ordering and provisioning, 3) repair and maintenance, and 4) billing and usage.

The first function is Pre-Ordering, which facilitates the exchange of information between GTE and CLECs regarding current or proposed customer products and services, or any other information required to initiate ordering of service.

The second function is Ordering and Provisioning, which automates and streamlines order processing to improve the exchange of information between GTE and CLECs related to requests for service from GTE.

The third function is Repair and Maintenance, which enhances the CLECs' capability to access repair and maintenance services systems related to service repair requests.

The last function is Billing and Usage, which enhances billing accuracy to facilitate the transfer of customer billing information between GTE and CLECs.

Q. HOW WERE THESE FUNCTIONS FURTHER DIVIDED?

A. Each of the functions was further divided into individual "projects" that represented groupings of related software development efforts. The projects were defined by rolling up related Data Processing Service Requests ("DPSRs") into an overall grouping or project. In total, GTE included 22 OSS projects in its cost study. Although each project may have contributed to multiple OSS functions, for purposes of cost recovery each project was identified based on the primary or overriding purpose of the project and categorized into one of the four major OSS process functions noted above.

A. Pre-Ordering

Q. BEFORE YOU CONTINUE WITH THE DESCRIPTION OF THE FOLLOWING PROJECTS, PLEASE EXPLAIN THE ORDERING BILLING FORUM ("OBF") AND ITS ROLE.

A. OBF is a forum of the Alliance for Telecommunications Industry Solutions ("ATIS"); a group that is heavily involved in standards issues including interconnection and interoperability. The OBF provides a forum for telecommunications customers and providers (ILECs, CLECs and interexchange carriers ("IXCs") to identify, discuss and resolve national issues which affect ordering, billing, provisioning and exchange of information about access services. The OBF is involved in the development of standard mechanisms by which ILECs and CLECs can interface effectively in the post-Act environment.

Q. PLEASE DESCRIBE THE SYSTEM CHANGES THAT GTE MADE IN ORDER TO MAKE ITS PRE-ORDERING PROCESSES AVAILABLE TO CLECS.

A. GTE is providing CLECs with four means of pre-ordering; three of which are based on electronic interfaces and the fourth, which relies on paper. The first electronic option is a form-based web interface relying on a proprietary GUI that can be used to provide dial-up or dedicated access (implemented January 1997) or Internet access

(implemented September 1998) between the CLEC and GTE support systems. The second supports HyperText Transfer Protocol (HTTP) data streams and is based on web standards. The last electronic option supports application-to-application needs using Common Object Request Broker Architecture ("CORBA")[2] connectivity. Each of these options provide CLECs with the capability to query, in real-time and in an electronic format, for all information needed to process the pre-order request, as well as to receive back from GTE any responses, error messages, or selection information necessary to complete the request.

Q. HOW DO CLECS BENEFIT BY THE AVAILABILITY OF THESE OPTIONS?

A. CLECs benefit by obtaining non-discriminatory access to the same information used by GTE's retail business when retail end users order service. Using these interfaces, CLECs are able to obtain information such as end user address verification, request for telephone number, service availability, and service appointment scheduling (due date). This information allows the CLEC to provide quality service to their customers.

[2]CORBA is the industry standard for exchanging data such as pre-ordering and customer service record (CSR) information. CORBA provides a standard interface for interoperability between systems for managing and routing message traffic that reside on disparate platforms.

Q. WHAT PROJECTS DID GTE IDENTIFY IN ITS COST STUDY THAT PROVIDED THE AVAILABILITY OF THESE OPTIONS?

A. Projects 1 (Release 1, Open Market Transition), 12 (NOCV/SIGS Pre-ordering Functionality), 14 (Customer Service Request – Electronic Access Phase 1) and 18 (Pre-Order Enhancements) were all categorized as Pre-ordering and each contributed to the availability of these options.

Q. PLEASE EXPLAIN PROJECT 1.

A. The primary purpose of Project 1 was to develop GTE's initial Pre-ordering offering using a GUI. It pre-dated any industry standard and was developed using GUI technology in order to allow all CLECs the opportunity to access the information associated with pre-ordering. The interface allows a CLEC representative to log into a secure site and input minimal information in order to get pre-ordering information (e.g., address validation, telephone number assignment, due date assignment, and the availability of products and services) for a potential customer. This information is returned to the screen in a "real-time" mode.

Project 1 also developed the initial electronic interface for access to repair information, which is discussed below under Repair and Maintenance. In addition, GTE published a detailed instruction guide outlining the technical communication protocol used to deliver information to and from the GUI. It uses HTTP software

language, which is commonly used throughout the Internet. By following the guidelines, a CLEC is able to tie its system interface directly to GTE's pre-order interface. This is the basis for the second interface type listed in the description above.

Q. HOW DID GTE DEVELOP AND IMPLEMENT PROJECT 1?

A. Project 1 was GTE's first software development project undertaken in response to the FCC's First Report and Order. The Order was issued in August 1996 and required the provision of non-discriminatory OSS access by January 1, 1997. In considering the work required to develop this initial interface, GTE explored a variety of options, including development according to standard internal "business-as-usual" processes and outsourcing to four vendors with whom GTE had worked in the past. The results of this process indicated that a best estimate of the time required to complete the necessary interfaces required by the FCC order was approximately 17 to 21 months.

In addition, the options presented would have required an investment on the order of at least $500,000 by each CLEC in order to develop the necessary mainframe and system support required to access the interface developed by GTE. Alternative options included Common Management Information Protocol ("CMIP") and Customer Information and Control System ("CICS"). CMIP technology would have required that the CLECs have dedicated links to GTE's systems, requiring a

mainframe connection and specific hardware, which would be very expensive for the CLECs. Many middle tier CLECs do not have this resource available to them, and therefore would not be able to benefit from the access provided. CICS technology is a transactional interface into systems. Again, the CLECs would need a mainframe connection into GTE's systems. This could cost each CLEC approximately $500,000 per year.

Therefore, in light of the significant amount of time required for GTE to implement these interfaces, the substantial expense involved for both GTE and the CLECs, and the high degree of likelihood that many CLECs would be unable or unwilling to devote the necessary resources to develop the required interfaces, GTE determined that a radically different approach was required.

Q. WHAT APPROACH DID GTE TAKE?

A. GTE drew programming resources and already developed software and technology solutions from its long-established research and development affiliate, GTE Labs, to develop a wholly different approach from those previously under consideration. This approach, which was based on Internet technology, had the advantage of being capable of development within three to four months, sufficient to satisfy the FCC-required timeframe for non-discriminatory access to OSS. In addition, this approach would enable CLECs to interface with GTE through the Internet using

relatively simple and inexpensive existing technology -- a standard web browser, a computer and modem. This would enable all CLECs to participate without substantial up-front investment. Accordingly, GTE proceeded to develop Project 1 using resources from GTE Labs, and completed the initial pre-ordering and repair interfaces as scheduled.

Q. HOW DID THE COMPLETION OF PROJECT 1 BENEFIT CLECS AND THEIR CUSTOMERS?

A. By using the interface developed in Project 1, CLECs are able to retrieve essential pre-ordering information such as address validation, telephone number assignment, due date assignment, and the availability of products and services for potential customers. This is an on-line application and it enables them to provide timely quality service to their customers.

Q. WERE THERE ANY OTHER ASPECTS OF PROJECT 1?

A. Yes. In addition to the repair component, which is discussed later, Project 1 included security enhancements to the interfaces developed in this project. GTE received feedback from CLECs expressing concern about the security of their customer data and the ability to prevent access to this data by GTE as well as other CLECs. In response, using technology originally developed by GTE Government Systems, GTE was one of the first companies in the industry to implement a new means of secure

technology that enabled each CLEC to protect the security of its proprietary customer data while participating in the interface along with all other CLECs. This functionality was developed in direct response to CLEC concerns and provided an obvious benefit to CLECs.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 1 OR ITS ENHANCEMENTS?

A. No. Since this set of interfaces and the security enhancement was developed to provide secure access to information that was already available to GTE's retail business, no benefit was realized by GTE's retail operations.

Q. PLEASE EXPLAIN PROJECT 12.

A. Project 12 updated the Pre-ordering interface developed in Project 1 by allowing it to function with GTE's new retail and wholesale ordering system, National Ordering Collection Vehicle (NOCV). The new system, NOCV, replaced the existing retail ordering system used in Washington, Service Office Records and Computer Entry System ("SORCES"). Information previously retrieved from the old retail ordering system now had to be retrieved from NOCV. This project built the system "ties" necessary to retrieve the pre-ordering information from NOCV.

Q. PLEASE EXPLAIN WHY GTE CONVERTED TO NOCV.

A. Prior to the development of NOCV, which began in 1995, GTE had three different service order entry systems. The most widespread of these, SORCES, had been in place for over 20 years. SORCES was generally a cumbersome and inefficient service order entry system that was ill suited to the competitive needs of the changing telecommunications service environment. In the California region only, a regional order system called Service Order Load and Retrieval (SOLAR) had been in place in lieu of SORCES for a number of years. SOLAR lacked the ability to support national processes without modification. The third system, Customer Marketing and Service System ("CMSS"), was a client-server UNIX based platform in limited use. It was extremely limited in that it was unable to process complex business orders, and required special workstations to support the UNIX technology.

NOCV was developed to replace these systems and provide GTE with a nationwide mainframe application designed to increase order accuracy and customer satisfaction, speed order processing, reduce data processing costs, and standardize systems across consumer and business lines of business on industry standard hardware and software platforms. NOCV was created by using SOLAR based code which was then modified and enhanced to incorporate logic for national, as opposed to regional, deployment. NOCV was deployed in the Washington region in March 1998.

Q. WHAT BENEFITS DID NOCV PROVIDE TO CLECS?

A. NOCV addressed some significant issues that arose when SOURCES was expanded to permit CLEC access. Essentially, SOURCES involved hard coding of customer telephone number ownership to GTE, and hard coding of GTE-specific rules. SOURCES was therefore unable to tie an end user customer telephone number to a CLEC. When a CLEC submitted an order to convert an end user customer, this aspect of SOURCES required the creation of two separate orders: one to provision the service and one to bill the products and services to the CLEC rather than to the end user customer.

Q. HOW DID THE COMPLETION OF PROJECT 12 BENEFIT CLECS AND THEIR CUSTOMERS?

A. Project 12 made the GTE retail ordering system transition to NOCV transparent to the CLECs and allowed them to obtain the same information formerly retrieved from the old retail ordering system. More importantly, as explained above, the conversion to NOCV itself (the costs of which GTE is not seeking to recover in this proceeding) represented a significant improvement both for GTE as well as the CLECs, and therefore the system ties to enable CLEC access to NOCV provided a substantial benefit to CLECs.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 12?

A. No. As I explained for Project 1, GTE did not benefit from the work involved in Project 12, since it was designed to provide the CLECs access to a system to which GTE retail operations already had access.

Q. PLEASE EXPLAIN PROJECT 14.

A. This project added a new function to the existing pre-ordering interface developed in Project 1. It allows CLECs to electronically request and receive customer service record (CSR) information via the Internet. The CSR contains information about existing GTE retail customers and includes such data as their current features and services.

Q. HOW WILL THE COMPLETION OF PROJECT 14 BENEFIT CLECS AND THEIR CUSTOMERS?

A. By obtaining electronic access to the CSR, CLECs are able to better understand the current services used by their potential customers and to obtain this information in a timely manner. This puts them in a better position to provide high quality customer service tailored to the needs of their customers. This project was tested with a number of CLECs to insure that its functionality adequately met their needs.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 14?

A. No. GTE did not benefit from the availability of the CLECs' electronic access to CSR. This enhancement merely allowed CLECs to obtain the same information as GTE retail business representatives already had via NOCV.

Q. HOW DID GTE DEVELOP AND IMPLEMENT THESE PROJECTS?

A. As explained above, GTE used the programming resources of its IT group to perform this work. For the same reasons described above and with respect to Project 1, this was deemed to be the fastest, most reliable and cost effective alternative. In particular, since IT had already been selected to complete Project 1, the knowledge base with respect to that project already existed in IT. Therefore, the most efficient means of completing enhancements to Project 1 (which is what Projects 12 and 14 were) was to use the same personnel and resources as used to develop Project 1.

Q. PLEASE EXPLAIN PROJECT 18.

A. This project enhances the existing pre-order interfaces and includes upgrading them to the latest OBF standard (LSOG version 4)

Q. HOW WILL THE COMPLETION OF PROJECT 18 BENEFIT CLECS AND THEIR CUSTOMERS?

A. By providing support for the latest industry standard, CLECs are able to connect to GTE using the same rules they use with other ILECs.

Q. WILL GTE BENEFIT FROM THE COMPLETION OF PROJECT 18?

A. No. GTE will not benefit from Project 18.

Q. HOW IS PROJECT 18 BEING DEVELOPED?

A. As explained above, GTE is using the programming resources of its IT department to perform this work. For the same reasons described above and with respect to Project 1, this was deemed to be the fastest, most reliable and cost effective alternative. In particular, since IT had already been selected to complete Project 1, the knowledge base with respect to that project already existed in IT. Therefore, the most efficient means of completing enhancements to Project 1 (which is what Projects 12, 14 and 18 are) is to use the same personnel and resources as used to develop Project 1.

Q. WHEN DOES GTE EXPECT TO PUT PROJECT 18 INTO PRODUCTION?

A. Project 18 is currently scheduled for production during the fourth quarter of 2000.

B. Ordering and Provisioning

Q. PLEASE DESCRIBE THE ORDERING INTERFACE.

A. The purpose of the Ordering interface is to allow CLECs to enter, edit, and determine the status of orders. The Ordering interface allows access to data from GTE's NOCV system and its predecessor, SORCES. NOCV/SORCES is the system used by GTE for local retail, resale and UNE ordering. As explained above, development of NOCV began in 1995, prior to the Act and the FCC's OSS rules and orders. NOCV was deployed as the replacement for SORCES in July 1998 and included many changes required to maintain the same level of local wholesale service.

Q. PLEASE DESCRIBE THE TYPES OF ORDERING INTERFACES THAT GTE PROVIDES.

A. GTE provides three electronic interfaces for CLEC ordering. They are Fast Connect or NDM file transfer; Wholesale Internet Services Engine (WISE); and Electronic Data Interexchange ("EDI").

Q. PLEASE EXPLAIN THE FIRST METHOD OF ORDERING.

A. The first method GTE developed for "local wholesale" ordering uses the same type of industry-accepted interface currently used by IXCs for transmission of Access Service Request (ASR) and Carrier Access Bills. It uses Fast Connect or NDM as the transport mechanism to transmit Local Service Requests ("LSRs") to the National Open Market Center ("NOMC"), GTE's national CLEC ordering center, and relies on a simple fixed file text format based on Local Services Ordering Guideline (LSOG)

version 1 for content. One of the benefits of NDM is its ability to use existing file transfer products. CLECs can increase file transfer throughput by increasing the frequency of batch processing (dependent upon their order volume). Large interexchange carriers entering the local business primarily use this interface. Additional transports such as Internet email and file transfer protocol (FTP) are also supported by GTE for use by smaller, non-interexchange based CLECs.

Q. HAS GTE SEPARATELY IDENTIFIED THE COSTS ASSOCIATED WITH THIS INTERFACE?

A. No. The costs associated with developing this interface are included in Project 1, which I previously discussed in conjunction with Pre-ordering.

Q. PLEASE EXPLAIN THE SECOND ORDERING INTERFACE GTE DEVELOPED.

A. The second ordering interface developed for CLECs uses a WEB GUI application over the Internet called WISE. It allows CLECs to input ordering information directly into GTE's ordering system via the Internet, and query the status of orders over the Internet. It is used primarily by medium and small CLECs that do not wish to create their own ordering gateway.

Q. DID ONE OF GTE'S PROJECTS SUPPORT THIS INTERFACE?

A. Yes. The costs associated with providing this interface are included in Project 4.

Q. PLEASE EXPLAIN PROJECT 4.

A. Project 4 created the basic GUI used by CLECs to input LSR data directly into GTE's system.

Q. HOW DID THE COMPLETION OF PROJECT 4 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The interface created by Project 4 introduced a means for CLECs to input LSR ordering information into GTE's system. This allows for efficient ordering processes for CLECs that do not have their own ordering system.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 4?

A. No. This interface is not used by GTE's retail operations and does not benefit GTE in any way.

Q. PLEASE EXPLAIN THE THIRD ORDERING INTERFACE GTE PROVIDES.

A. The third ordering interface supports the OBF Local Services Ordering Guideline (LSOG) version 2. This format is supported by using the industry standard EDI version 8. This is the ATIS standard released February 2, 1998. LSOG2/EDI 8

provides a national standard ordering capability. This functionality is targeted for Tier One CLECs. Tier One CLECs that opt to use LSOG2/EDI8, electronic transmission of incoming LSRs and Directory Service Requests ("DSRs") will be subjected to internal edits that reject or accept account information for processing. Those incoming LSRs and DSRs for simple services that are error-free will be processed without manual intervention. Electronic LSCs, error reports, jeopardy status reports and SAR information will be returned electronically.

Q. WHAT IS LSOG?

A. LSOG is a master "dictionary" that defines every field in the LSR to insure consistent use and interpretation by all industry users of the LSR. New releases are issued periodically by the OBF. GTE generally supports the development of industry standards wherever possible. Although there are currently no guidelines in place with regard to when new LSOG versions should be implemented; these issues are under discussion at the OBF. GTE's current practice is to have the two most recent versions available in order to provide both flexibility and up-to-date information.

Q. HOW DO THE CLECS BENEFIT BY THE AVAILABILITY OF THIS INTERFACE?

A. Large and medium CLECs are expected to migrate to this industry standard interface and will benefit from its "real-time" response in processing and responding to customer orders.

Q. DID ONE OF GTE'S PROJECTS SUPPORT THIS INTERFACE?

A. Yes. The cost associated with the availability of this interface are included in Project 7.

Q. PLEASE EXPLAIN PROJECT 7.

A. Project 7 created a new interface and format to support the industry standard LSOG version 2.

Q. HOW DID THE COMPLETION OF PROJECT 7 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The interface allows CLECs with their own system and means to send GTE LSR ordering information using the LSOG version 2 standard. It is an efficient way to process large volumes of orders.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 7?

A. No. This system is not used by GTE's retail operations and does not benefit GTE in any way.

Q. PLEASE EXPLAIN PROJECT 19.

A. Project 19 creates a new interface and format to support the industry standard LSOG version 4.

Q. HOW WILL THE COMPLETION OF PROJECT 19 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The interface allows CLECs with their own system and means to send GTE LSR ordering information using the LSOG version 4 standard. It is an efficient way to process large volumes of orders.

Q. WILL GTE BENEFIT FROM THE COMPLETION OF PROJECT 19?

A. No. This system is not used by GTE's retail operations and does not benefit GTE in any way.

Q. WHEN DOES GTE EXPECT TO PUT PROJECT 19 INTO PRODUCTION?

A. Project 19 is currently scheduled for production during the fourth quarter of 2000.

Q. HAS GTE MADE ANY OTHER FUNCTIONALITY AVAILABLE TO THE CLECS?

A. Yes. In addition to the interface development work, GTE had to create a means of editing, storing and routing the new type of ordering information being sent by

CLECs. An entirely new system called Secure Integrated Gateway System (SIGS) was created for use by the NOMC. The functions performed by this system include up-front electronic editing of the LSR received from the CLEC; storing of the information on the LSR in a dynamic database; and routing of the LSR to either the flow-through engine or a NOMC associate. This system was required to eliminate the manual paper processing within the NOMC and drastically decrease the ordering time associated with the LSR process.

Q. HOW DID GTE DEVELOP AND IMPLEMENT THIS FUNCTIONALITY?

A. As described above, this development project was handled by the IT organization. It was built as an outgrowth of Project 1, and the same resources used to develop that project apply here as well.

Q. HOW DO THE CLECS BENEFIT BY THE AVAILABILITY OF THIS FUNCTIONALITY?

A. Development of SIGs provides a substantial benefit for CLECs because of the significant improvement in GTE's handling time and reduction in errors caused by human handling of the orders. Prior to the advent of SIGS, the huge volume of LSRs generated by CLECs were all received, processed, stored and retrieved manually by GTE. Internal workflow was distributed and managed manually, all of which created

significant delays in processing LSRs, correcting errors, retrieving LSRs to input changes or provide status reports to CLECs, and so on.

SIGs automated the entire process. A business rules engine within SIGs automatically screens the entire LSR up front for errors, and either automatically corrects those errors where possible, or returns the LSR electronically to the CLEC immediately for correction. This saves substantial time in identifying problems at the front end of the process. A distribution and work flow management engine automatically distributes LSRs among the representatives in the various NOMCs according to their individual skill sets and workloads, thereby using GTE's internal resources as efficiently as possible and further speeding processing time.

In summary, this new system allows approximately 700 mechanical edits to be performed on a LSR and will return any errors found to the CLEC within minutes. This allows the CLEC to resubmit a supplemental LSR without losing valuable time. This system also creates efficiency within the NOMC allowing for shorter handling times leading to better service. GTE's retail operations do not utilize SIGs at all, and therefore do not benefit from its development.

Q. WHAT PROJECTS SUPPORTS THIS FUNCTIONALITY?

A. Projects 2, 6, 10 and 11 provided the support needed to develop this system. These are described in the cost study as:

- Project 2 (LSR Work Flow Manager/Distribution/Mechanized Edits)
- Project 6 (Simple Order Flow Through (Electronic to Electronic)
- Project 10 (Mechanized Edits)
- Project 11 (Services Activation Report Enhancements – Phase 1 and Phase 2)

Q. PLEASE EXPLAIN PROJECT 2.

A. Project 2 automated and streamlined order processing at the NOMC by creating the basic system used to edit, store and route the LSR to the appropriate NOMC representative. The cost for this project is listed in the cost study.

Q. HOW DID THE COMPLETION OF PROJECT 2 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The system created by Project 2 introduced the mechanized edits and significantly improved order handling by reducing the number of LSRs that require manual intervention. These changes improve the entire process used by a CLEC to provide service to their customers, and decrease the length of time required to provision service.

Q. PLEASE DESCRIBE PROJECT 6.

A. Project 6 created the basic order "flow-through" engine used to mechanically create an order within GTE's retail ordering system NOCV. Once a simple resale order is received by GTE and passes the mechanized edits, it bypasses the NOMC representative and is sent through the "flow-through" engine without manual handling. This allows the LSR to mechanically "flow-through" to the retail ordering system within minutes, significantly improving handling time and eliminating human errors. Simple orders capable of being processed in this manner include business and residential POTS service consisting of 12 lines or less, and orders for disconnect, as-is resale, as-specified resale, change-to features, Primary Inter-Exchange Carrier ("PIC") changes, and telephone number records requests.

Q. HOW DID THE COMPLETION OF PROJECT 6 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The system created by Project 6 introduced automated order "flow-through" and significantly improved order-handling time and eliminated human errors. Prior to the development of this flow-through engine, NOMC representatives had to "re-key" information from the LSR housed in SIGS into NOCV. With this project, certain LSR order types housed in SIGS create a NOCV order mechanically, which eliminates the manual "re-keying" function performed by the NOMC representative. These changes have improved the entire process used by CLECs to provide service to

their customers, and have steadily increased the automatic flow-through percentage of LSRs.

Q. PLEASE EXPLAIN PROJECT 10.

A. Project 10 enhanced the mechanical LSR editing functions. Because this project involved the development of numerous connections between SIGS and the back end mainframe systems to improve the up-front editing functions of SIGS, it involved fairly complex and expensive software modifications. It increased the number of LSR fields that could be mechanically edited and provided further validation against existing data tables (*i.e.*, Service Address Validation). In addition, the edits were very robust in the sense that they tied not only to standard OBF information tables, but also tied directly to the back end data processes involved in GTE's systems. Prior to this release, service address validation was performed manually at the NOMC.

Q. HOW DID THE COMPLETION OF PROJECT 10 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The system created by Project 10 enhanced the mechanical LSR editing functions and significantly improved order handling within the NOMC. These changes improved the speed and accuracy of the entire process used by CLECs to provide service to their customers.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 10?

A. No. This system is not used by GTE's retail operations and does not benefit GTE in any way.

Q. PLEASE EXPLAIN PROJECT 11.

A. Project 11 developed report enhancements to provide the ability to electronically notify CLECs of order completion. Once the order is completed in NOCV and posted to the billing system, a detailed record is created and sent to the CLEC.

Q. HOW DID THE COMPLETION OF PROJECT 11 BENEFIT CLECS AND THEIR CUSTOMERS?

A. The project created a detailed completion notice for each LSR and transported it back to the CLEC. These changes improved both speed and accuracy, and allowed CLECs to provide responsive service to their customers.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 11?

A. No. This system is not used by GTE's retail operations and does not benefit GTE in any way.

Q. THIS SECTION OF YOUR TESTIMONY, AS WELL AS THE FCC ORDER, REFERS TO ORDERING AS WELL AS PROVISIONING. WHAT PROVISIONING COSTS IS INCLUDED IN GTE'S COST STUDY?

A. Provisioning costs included in this discussion and in GTE's cost study do not contain the costs associated with physically installing services. Instead, they include the costs associated with systems changes needed to fulfill CLEC orders. These costs occur when enhancements are made to existing GTE retail systems to prepare them for use in provisioning CLEC orders. I use the term "make ready" throughout the remainder of this testimony to refer to these types of system enhancements.

Q. DID GTE ENHANCE ANY EXISTING RETAIL SYSTEMS FOR THE BENEFIT OF THE CLECS?

A. Yes. In addition to the SIGS system used by the NOMC, "make ready" work was required to enhance GTE's existing retail systems. The term "make ready" refers to enhancements necessary to allow a legacy system to operate within the local wholesale environment. The system enhancements that were required allowed GTE to process orders from CLECs in the same manner as those received from its own retail operations. Examples of this "make ready" work include providing new fields or rules to permit CLECs to input UNE information, CLEC identifiers which indicate that services are provided by a CLEC, and enhanced data feeds to the Directory

Company and billing systems which reflect the existence of CLEC-provisioned services.

Q. HOW DID GTE DEVELOP AND IMPLEMENT THESE SYSTEMS?

A. As described previously, the group that worked on the original project performed these enhancements. In virtually every case, this was the GTE IT organization.

Q. HOW DID THESE CHANGES BENEFIT THE CLECS?

A. These changes were required in order to fulfill the ordering requests of the CLECs and are a direct benefit to them because without these changes, GTE would be unable to provision the services requested by the CLECs.

Q. PLEASE IDENTIFY THE PROJECTS AND COSTS GTE QUANTIFIED THAT SUPPORTED THESE CHANGES.

A. Projects 1, 3, 6, 7 and 11 supported these "make ready" changes. The respective costs for the "make ready" work cannot be separately identified and are included in the respective project totals.

Q. DID GTE BENEFIT BY THESE CHANGES?

A. No. Although these changes were made to the same systems used by GTE retail operations, GTE does not use them to provide retail service and the retail operation

does not benefit from them in any way. These changes were necessary to make systems compatible with new wholesale products and services desired by the CLECs.

Q. WOULD YOU PLEASE DESCRIBE THESE PROJECTS?

A. I have provided descriptions for Projects 1 (pre-ordering), 6, 7 and 11 (all under ordering and provisioning). Project 3 will be discussed later when I address Billing and Usage.

C. Repair and Maintenance

Q. PLEASE EXPLAIN GTE'S REPAIR AND MAINTENANCE SYSTEMS.

A. GTE processes all repair requests involving its network, whether from retail or wholesale users, via trouble tickets that are processed through GTE's Trouble Administration System ("TAS"). GTE has provided CLECs the capability to electronically send all information needed to process the trouble ticket request, and receive back from GTE any responses, error messages, or selection information necessary to complete the request. The SIGS gateway provides the electronic interface into TAS. This interface can be accessed through Netscape 3.0, a WEB GUI via the Internet or an Application Programming Interface (API) from the CLECs existing systems. This gateway processes trouble tickets through the same GTE back-end systems used by GTE's own internally produced trouble tickets. Once the

request is entered, it is processed through the TAS, and GTE employees are dispatched as necessary via the Automated Work Administration System ("AWAS"). Alternatively, the CLECs can provide repair information to GTE's CARE centers via an 800 toll-free access (with separate numbers for engineered, or designed, and non-engineered circuits).

Q. WHAT PROJECTS ARE ASSOCIATED WITH REPAIR AND MAINTENANCE?

A. Costs associated with this repair and maintenance interface is included in Projects 1, 5 and 20.

Q. ARE THE COSTS ASSOCIATED WITH THIS REPAIR INTERFACE INCLUDED IN PROJECT 1 SEPARATELY IDENTIFIED?

A. No. The repair interface was developed in conjunction with the pre-order interface described above in connection with Project 1. This project was the initial rollout of GTE's Internet-based access system, which functions for both pre-ordering and repair purposes. Although certain costs such as vendor costs could be separately identified, such separation was not appropriate given the shared and integrated nature of the project.

This aspect of Project 1 developed an electronic interface, similar to that developed for pre-ordering, which provided CLECs with access to GTE's repair system. This interface allowed CLECs to determine the creation, status and cancellation of trouble tickets on facilities used by the CLECs to provide service to their customers. This capability benefited CLECs and their customers by allowing CLECs to provide up-to-date repair service and information to their customers.

Q. HOW WAS THIS PORTION OF PROJECT 1 DEVELOPED?

A. The repair portion of Project 1 was developed by IT in conjunction with an outside vendor that had originally built the internal repair interfaces that were being modified. Therefore, the decision was made to leverage this experience and familiarity with the existing systems to produce a lower cost product for enhancing those systems.

Q. PLEASE EXPLAIN PROJECT 5.

A. Project 5 enhanced the repair interface to provide Internet access and added ability for CLECs to perform mechanized line tests. With this interface, CLECs are able to perform a "real-time" remote test of an existing line and receive detailed results. This interface also provides additional status and clearing codes allowing CLECs to obtain up-to-date information about repair tickets.

Q. HOW WAS PROJECT 5 DEVELOPED?

A. This project involved work on two components of the interfaces -- a SIGS component and a back office component. SIGS is the integrated interface that CLECs use to access the back office repair systems. SIGS provides the security and user authentication and authorization functions that contain the CLEC user profile and a table that describes the relationship between the telephone number and the CLEC. SIGS provides the workflow to the back office interface to GTE's repair systems and databases.

As with Project 1, Project 5 was developed in conjunction with the same outside vendor that had originally built the internal repair interfaces that were being modified. Therefore, it was cheaper and faster to outsource a large portion of this project to that vendor. However, part of this project also required changes to the SIGS component through which the repair interface was made available to CLECs. Since internal GTE IT resources were used to develop SIGS, those same resources were used to develop the enhancements and connections to the SIGS component.

Q. HOW DID THE COMPLETION OF PROJECT 5 BENEFIT CLECS AND THEIR CUSTOMERS?

A. By allowing the CLEC to perform mechanized line tests without the need to go through GTE, and providing better and faster detail on trouble ticket status and

clearing, the process of repairing a CLEC's customer line has been significantly improved. In many instances, this ability enables the CLEC to determine on its own quickly and inexpensively whether trouble lies within GTE's network or the customer premises. As a result, the CLEC can save time and avoid the potential expense of paying GTE to do the same thing and possibly requiring a premises visit.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 5?

A. No. This interface is not used by GTE's retail operations and GTE does not benefit in any way. It allows CLECs to obtain access to functions already available to GTE retail.

Q. HOW IS PROJECT 20 BEING DEVELOPED?

A. This project develops an Integrated Voice Response Unit ("IVRU") for GTE's repair call center used by CLECs. It also enhances the WISE interface to improve the screen layout and increase usability.

Q. HOW WILL THE COMPLETION OF PROJECT 20 BENEFIT CLECS AND THEIR CUSTOMERS?

A. By developing the IVRU, improved answer time and functionality will be experienced by the CLECs. Enhancements to the WISE interface will also improve the overall CLEC experience.

Q. WILL GTE BENEFIT FROM THE COMPLETION OF PROJECT 20?

A. No. This interface will not be used by GTE's retail operations and GTE does not benefit in any way. This project establishes an IVRU and enhances WISE, which are interfaces used by CLECs only.

Q. WHEN DOES GTE EXPECT TO PUT PROJECT 20 INTO PRODUCTION?

A. Project 20 is currently scheduled for production during the fourth quarter of 2000.

D. Billing and Usage

Q. PLEASE EXPLAIN GTE'S BILLING AND USAGE SYSTEMS.

A. GTE uses its retail end user billing system, Customer Billing Service System ("CBSS"), to bill retail, resale and unbundled services. CBSS billing data can be provided on paper, Compact Disk Read-Only Memory (CD-ROM), or as an electronic file structured in standard EDI version 811 electronic format. Transmission of a CBSS bill in EDI 811 format is available over the existing NDM application used for carrier bills. GTE also uses CBSS to bill retail and resale usage. Local usage information is provided along with access usage records in an industry-standard Electronic Message Record ("EMR") format. GTE also provides unrated usage records to the CLECs for their use in billing their end user customers. (Unrated usage records record the amount of usage and information necessary to permit the CLEC to

apply its own rates to the usage as appropriate.) Customer billing information is obtainable for the end user in the same manner that GTE obtains relevant information about its customers necessary for the rendering of an invoice/bill. GTE has deployed an NDM application for the delivery of usage records to each CLEC. Magnetic tape is also available.

Q. WHAT PROJECTS DID GTE UNDERTAKE TO PROVIDE THIS INTERFACE?

A. Costs associated with this interface are included in the following projects:

- Project 3 (Account Restructure for CBSS)
- Project 8 (Immediate Billing of Local Switching – Phase I and Phase 2)
- Project 9 (Expand XD Table for Bill Fractionalization)
- Project 13 (EMR Call Record Format Change to Format 425001)
- Project 15 (Placing INP Telephone Numbers on the BH Field)
- Project 16 (LEC Carried Alternate Billing Service billed to an OMT Service)
- Project 17 (Option for CLEC Single Monthly Bill)
- Project 21 (Billing Enhancements)

Q. HOW DID GTE DEVELOP AND IMPLEMENT THESE PROJECTS?

A. Initially, GTE considered the feasibility of modifying its Carrier Access Billing System (CABS), instead of CBSS, to provide the necessary flexibility to perform CLEC billing. However, there were technical issues associated with bringing the billing of local services into a billing system designed for billing carrier usage. In contrast, since the products that would be purchased by CLECs mirror GTE's retail products, the same ordering and billing platform could be used with modification. Therefore, the determination was made that the more cost-effective route was to modify CBSS to accommodate CLEC billing needs.

Nevertheless, significant "make ready" work was still required within the CBSS system in order to bill resale and UNE services.

Q. WHO PERFORMED THE WORK REQUIRED IN THESE PROJECTS?

A. As described earlier, the work required to be completed for these billing projects was performed by IT as the most cost-effective alternative. GTE personnel had a strong knowledge base associated with the various pieces of the billing system, and this familiarity allowed GTE to implement the necessary changes in a shorter timeframe and at a lower cost than would be required by outsourcing this work.

Q. DOES GTE BENEFIT BY THE AVAILABILITY OF THIS INTERFACE?

A. No. Although these projects enhanced many of the systems used by GTE's retail operations, the changes were made to provide CLEC access to those systems, not to benefit GTE's retail operations. These changes were necessary to make billing systems compatible with new products and services desired by CLECs.

Q. PLEASE EXPLAIN PROJECT 3.

A. Billing is a complex process, especially when usage is involved. In order to create quality billing for CLECs, GTE had to make many changes to its individual billing-related retail systems. General categories of system modifications included billing account number changes, usage guiding changes and multi-vendor billing capability. In the beginning, GTE had to create a "fictitious" account number in order to bill the CLEC. It did not resemble the end user's telephone number and created confusion for CLECs. This project allowed GTE to bill the CLEC using the correct end user telephone number as the account number, thereby making it easier for the CLEC to audit the charges. Also under this project, new data tables were created to route usage received from the switch to the proper CLEC account. This allowed unrated daily records to be sent to the CLECs for use in their billing systems when rendering a bill to their end user customers. Multi-vendor billing was also included in this project. Multi-vendor billing is the ability to bill different providers of service under the same account number or telephone number. This provided the maximum

flexibility for customers to choose different providers for different services and therefore allow competition to flourish.

Q. HOW MANY INDIVIDUAL BILLING-RELATED SYSTEMS WERE MODIFIED?

A. At least 22 systems were modified; many of which were individual systems within the CBSS family of related systems. Many individual systems required modification or expansion to accommodate additional CLEC information. Other systems, such as those used for billing inquiries, storage and printing, and access by customer representatives, required the addition of a firewall or other mechanism to insure that CLEC data could only be accessed by the appropriate persons. Still other non-billing systems, such as NOCV, required additional edits to interface with the changes made in the billing systems. Other systems, such as those relating to marketing or bill treatment, had to be modified to segregate CLEC activity.

Q. HOW DID THE COMPLETION OF PROJECT 3 BENEFIT CLECS AND THEIR CUSTOMERS?

A. This project directly benefits the CLECs by creating the flexibility for them to effectively bill customers and by making it easier for them to audit the charges. It also allows multiple CLECs to resell GTE services to the same account and be billed

using the end user's telephone number as the account number. This was done at the request of CLECs who objected to the use of "fictitious" account numbers.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 3?

A. GTE's retail operations do not benefit directly from these changes, which are designed specifically to accommodate local competition by providing multiple CLECs with simultaneous access to the same billing telephone number in GTE's billing systems. However, GTE did benefit in an incidental manner, since this capability also allowed GTE to continue billing any services which the customer wanted to continue receiving from GTE, e.g., yellow pages directory advertising. At the same time, however, the availability of continued billing for residual GTE services in turn yielded a substantial benefit for the CLECs, since it permitted such billing to continue on a monthly basis instead of being accelerated to a lump sum final bill at the time the customer opted to switch from GTE to a CLEC.

Q. PLEASE EXPLAIN PROJECT 8.

A. This project creates the means for GTE to render billing associated with unbundled local switching. It developed the mechanism to capture unique usage associated with unbundled line ports and rate that usage in accordance with interconnection agreements. Prior to unbundled switching, all usage was recorded and rated within GTE. With the creation of unbundled local switching, GTE had to record usage

specifically for the CLEC. This project allows usage records to be recorded and fed to the CLEC without rating. Therefore the CLEC can use them to bill their end user customers and interexchange carriers as appropriate. In addition, GTE uses the records to bill CLECs new wholesale rates based on individual interconnection agreements. Had GTE not made these enhancements, these minutes of use would process through CBSS and rate at GTE's exchange tariff rates instead of the wholesale rates.

Q. HOW DID THE COMPLETION OF PROJECT 8 BENEFIT CLECS AND THEIR CUSTOMERS?

A. It provides accurate billing to CLECs for unbundled local switching, which was necessary for them to provide quality service to their customers. CLECs who do not need a full bundled service (resale) are able to purchase only the switching component from GTE. This allows CLECs with their own network facilities (e.g., cable television companies) to purchase GTE's local switching and combine it to their own assets to produce a bundled telecommunications service.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 8?

A. No. GTE's retail operations do not benefit from these changes in any way.

Q. PLEASE EXPLAIN PROJECT 9.

A. This project provides the ability to fractionalize billing to CLECs when they choose to modify their market entry strategy or change the way they purchase products. For example, fractionalized billing is required when a CLEC enters the market by purchasing services from a GTE wholesale tariff and then, at some later date, negotiates an interconnection contract with different rates and moves its embedded base to the new rate structure. This project also allows for the flexibility in billing required to adapt to regulatory policies developed in Washington and elsewhere of establishing interim rates for many CLEC services, as well as the existence of to-be-determined rates. All such rates are subject to later change by the establishment of final rates or the adoption of an existing interconnection agreement entered into by another carrier, and this project allows the flexibility to adapt to those rate changes.

Q. HOW DID THE COMPLETION OF PROJECT 9 BENEFIT CLECS AND THEIR CUSTOMERS?

A. One of the hallmarks of market entry in the rapidly changing telecommunications market is the need for CLECs to target markets and change strategies as they gain customers and build facilities. This project gives the CLECs maximum billing flexibility when choosing and expanding their market position.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 9?

A. No. GTE's retail operations do not benefit from these changes in any way.

Q. PLEASE EXPLAIN PROJECT 13.

A. This project allows GTE to create and transport unrated daily usage records associated with the "event based" calling product set. An example of event-based calling is automatic call return. When the end user uses the service, a charge is assessed for each use rather than for a flat monthly fee. Prior to completion of this project, GTE always rated the event and did not have a means of creating the industry standard unrated record. With the completion of this project, however, CLECs now receive unrated records from GTE for their use in billing their customers.

Q. HOW DID THE COMPLETION OF PROJECT 13 BENEFIT CLECS AND THEIR CUSTOMERS?

A. As a result of implementing this project, CLECs now use the unrated record that is created to accurately bill their end user customers. This provides the CLECs flexibility in pricing services as they choose and allows for greater bill accuracy.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 13?

A. No. GTE's retail operations do not benefit from these changes in any way.

Q. PLEASE EXPLAIN PROJECT 15.

A. This project allows GTE to properly screen interLATA alternately billed terminating usage associated with a ported telephone number. Examples of alternately billed terminating usage include third party calling, collect calls and calling card calls. This project allowed GTE to identify the CLEC that owned the line and to forward usage to the appropriate provider.

Q. HOW DID THE COMPLETION OF PROJECT 15 BENEFIT CLECS AND THEIR CUSTOMERS?

A. Project 15 allows charges associated with alternately billed calls to be sent to the proper billing company (*i.e.*, to the interexchange company billing the call). Without this project, the usage associated with alternately billed calls went unbilled by the appropriate carrier.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 15?

A. No. GTE's retail operations do not benefit from these changes in any way.

Q. PLEASE EXPLAIN PROJECT 16.

A. This project allows GTE to provide CLECs the intraLATA usage originated by their end users for alternately billed calls. Examples of alternately billed calls include third party calling, collect calls and calling card calls.

Q. HOW DID THE COMPLETION OF PROJECT 16 BENEFIT CLECS AND THEIR CUSTOMERS?

A. Project 16 allows CLECs to obtain accurate usage records associated with alternate billed calls for billing of their end users. Without this project, CLECs would not receive the data required to bill for alternate billed calls and would lose the revenue associated with these services.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 16?

A. No. GTE's retail operations do not benefit from these changes in any way.

Q. PLEASE EXPLAIN PROJECT 17.

A. Project 17 provides the ability for the CLEC to request a single billing cycle each month. GTE bills its end users in 10 monthly cycles in order to spread billing activity evenly throughout the month. Prior to completion of this project, an end user's billing cycle remained the same upon transition to a CLEC, and therefore a CLEC could have received bills during any of the 10 cycles that occur during the month.

Q. HOW DID THE COMPLETION OF PROJECT 17 BENEFIT CLECS AND THEIR CUSTOMERS?

A. Prior to the completion of this project, GTE sent a CLEC as many as 30 separate bills each month (e.g., one for each of GTE's 10 different billing cycles times the three

primary customer types -- residence, business and government). This project was completed based on requests of CLECs who did not wish to receive that many bills, but instead wanted all their customer billing consolidated into a single monthly bill. Receipt of a single bill greatly increases convenience and reduces the administrative burden to CLECs.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 17?

A. No. GTE's retail operations do not benefit from these changes in any way.

Q. PLEASE EXPLAIN PROJECT 21?

A. Project 21 enhances GTE's current billing to the CLECs by providing additional information on the bill, such as circuit ids associated with UNE loops. It also provides enhancements to reject usage sent by third parties by providing additional information.

Q. HOW WILL THE COMPLETION OF PROJECT 21 BENEFIT CLECS AND THEIR CUSTOMERS?

A. Project 21 will improve the ability of the CLEC to audit the bills received from GTE. It will also allow for proper billing of third party usage.

Q. WILL GTE BENEFIT FROM THE COMPLETION OF PROJECT 21?

A. No. This functionality will not be used by GTE's retail operations and GTE will not benefit in any way.

Q. WHEN DOES GTE EXPECT TO PUT PROJECT 21 INTO PRODUCTION?

A. Project 21 is currently scheduled for production during the fourth quarter of 2000.

E. Performance Measures

Q. PLEASE DESCRIBE GTE'S ROLLOUT OF CLEC PERFORMANCE MEASURES (PROJECT 22)?

A. During April 2000, GTE completed Project 22 which established a comprehensive set of performance measures designed to allow CLECs to determine how GTE's OSS systems and processes are performing. The measures and standards are based on a California Commission order and is the work product of an extensive collaborative effort between CLECs and GTE. CLECs operating within the state of Washington will have access to Washington specific results by logging into a secure Internet web site.

Q. HOW DID THE COMPLETION OF PROJECT 22 BENEFIT CLECS AND THEIR CUSTOMERS?

A. By allowing the CLECs to obtain OSS performance results via the Internet, they will be in a position to predict future performance and develop their own processes/systems.

Q. DID GTE BENEFIT FROM THE COMPLETION OF PROJECT 22?

A. No. This interface is not used by GTE's retail operations and GTE does not benefit in any way.

Q. HOW MUCH IS GTE SEEKING TO RECOVER FOR EACH OF THE PROJECTS DESCRIBED ABOVE (PROJECTS 1-22)?

A. GTE's total company cost associated with each of the projects is listed on page 5 WA 14 of Exhibit LC-2C from Ms. Casey's testimony.

V. FUTURE OSS ENHANCEMENT

Q. DOES GTE CONTINUE TO DEVELOP OSS INTERFACE SYSTEMS IN ADDITION TO REQUIREMENTS THAT WERE PREVIOUSLY IMPLEMENTED?

A. Yes. Absent national ILEC/CLEC interface standards, GTE has had to develop interfaces for CLECs to use over the past several years. In many cases these interfaces took on the form of a GUI and were later supplemented with

application-to-application interfaces when industry standards were developed. Currently, GTE is actively involved in pursuing national interface standards for OSS systems. GTE participates in various ATIS OSS committees that have been organized for this purpose. By supporting these efforts, GTE intends to continue managing the costs of developing future interfaces, and develop those enhancements in a manner that allows CLECs to realize the full benefits of the functionality being developed.

Q. WHAT OSS IMPROVEMENTS HAS GTE UNDERTAKEN FOR COMPLETION IN 2000 AND BEYOND?

A. GTE is constantly improving its OSS performance. In 2000, GTE will focus on Order Flow-Through and Billing Enhancements. Other functional requirements that are planned for 2000 include (1) those activities identified in Projects 18-22; (2) ordering and pre-ordering; (3) electronic bonding for repair; and (4) a significant increase in percent of flow through order processing.

VI. CONCLUSION

Q. PLEASE SUMMARIZE THE MAIN POINTS OF YOUR TESTIMONY.

A. GTE has undertaken a number of OSS projects since 1996 to implement FCC rules and orders promulgated under the Act. These projects offer CLECs functional capabilities that

they would otherwise not have. These projects do not benefit GTE's retail operations but do benefit the CLECs and their customers. By drawing on its internal, industry-recognized expertise, GTE was able to commence these projects promptly and to ensure that they were prudently developed and effectively implemented. GTE should be provided recovery of the costs it incurred to conduct these projects and implement changes to its OSS.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.