STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC UTILITY CONTROL
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 05-06-12 DPUC INVESTIGATION OF THE TERMS AND CONDITIONS UNDER WHICH VIDEO PRODUCTS MAY BE OFFERED BY CONNECTICUT'S INCUMBENT LOCAL EXCHANGE CARRIERS

May 5, 2006

By the following Commissioners:

Jack R. Goldberg
John W. Betkoski, III
Anne C. George
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DRAFT DECISION

This draft Decision is being distributed to the parties in this proceeding for comment. The proposed Decision is not a final Decision of the Department. The Department will consider the parties' arguments and exceptions before reaching a final Decision. The final Decision may differ from the proposed Decision. Therefore, this draft Decision does not establish any precedent and does not necessarily represent the Department's final conclusion.

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DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Department of Public Utility Control concludes that the Southern New England Telephone Company d/b/a SBC Connecticut has satisfactorily demonstrated that from a regulatory perspective its planned Internet Protocol-based video product is distinguishable from cable television service. In forming this conclusion, the Department has analyzed the Internet Protocol-based video product - or IPTV as proposed by SBC, in light of the federal and state definitions of what constitutes a cable service. In essence, the Department finds that SBC's planned IPTV service is merely another form of data stream transmitted like data over the Internet, and as such it is not subject to legacy cable franchising requirements.

B. BACKGROUND OF THE PROCEEDING

The parent company of the Southern New England Telephone Company d/b/a SBC Connecticut, SBC Communications, Inc.[1] (SBC) and the parent company of Verizon New York, Inc., Verizon Communications Inc. (Verizon) have announced plans to offer video products in Connecticut. The Department of Public Utility Control (Department) initiated this proceeding pursuant to §§ 4-176 and 16-11 of the General Statutes of Connecticut (Conn. Gen. Stat.) to investigate the terms and conditions under which those video products could be offered in the state.

By letter dated June 27, 2005,[2] the Department requested that the Southern New England Telephone Company d/b/a SBC Connecticut (Telco) and Verizon New York, Inc. (Verizon-NY) provide a description of the underlying platforms that each company expected to utilize in the delivery of their video products. The Telco and Verizon-NY filed their responses to that request on July 14, 2005 and July 11, 2005, respectively.

C. CONDUCT OF THE PROCEEDING

In light of the Telco and Verizon-NY responses and to facilitate its investigation, the Department, on July 14, 2005, sought written comments from interested persons addressing their proposed video product offerings.[3]

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1 By letter dated December 21, 2005, the Southern New England Telecommunications Corporation informed the Department of SBC Communications, Inc.'s name change to AT&T, Inc. To minimize confusion and maintain consistency, the Department will continue to refer to the Telco's parent company as SBC.

2 Corrected on June 30, 2005.

3 See the Department's July 14, 2005 Notice of Written Comments and Reply Comments (Notice). In response to the Notice, the Department received written comments from: the Area Nine Cable Council (A.N.C.C.); the Attorney General for the State of Connecticut (AG); Cablevision of Connecticut, L.P., Cablevision of Southern Connecticut, L.P., and Cablevision of Litchfield, Inc. (collectively, Cablevision); Charter Communications Entertainment I, LLC (Charter); CoxCom, Inc. d/b/a Cox Communications New England (Cox); the New England Cable & Telecommunications Association, Inc. (NECTA); the Office of Consumer Counsel (OCC); the Telco, and Verizon-NY. The Department

By Notice of Hearing dated October 25, 2005, and by Notice of Rescheduled Hearing dated December 5, 2005, public hearings were conducted in this matter on December 7, 2005 and December 15, 2005, in the offices of the Department, Ten Franklin Square, New Britain, Connecticut 06051. The hearing was continued to February 2, 2006, but that hearing was cancelled.

By Notice of Reopened Hearing dated April 11, 2006, notice was issued that a public hearing would be convened at the offices of the Department on April 21, 2006, for the limited purpose of addressing certain filings made by the New England Cable and Telecommunications Association, Inc. and the Southern New England Telephone Company after the evidentiary record was closed. That hearing was held, continued to April 27, 2006. The hearing scheduled for April 27, 2006 was cancelled, and the record in this matter closed by Notice of Close of Hearing dated April 28, 2006. On May 5, 2006, the Department issued a draft Decision in this proceeding. All parties and intervenors were afforded the opportunity to file written exceptions and present oral argument concerning the draft Decision.

The following submitted written comment for the Department's consideration in this proceeding: State Legislature Energy and Technology Committee Co-Chairmen Senator John Fonfara and Representative Stephen Fontana; State Legislature Energy and Technology Committee members Senator Thomas J. Herlihy and Representative Kevin M. DelGobbo; State Representative Peter A. Tercyak; Senator Gary D. LeBeau; State Representative Peggy Sayers; State Representative Toni Boucher; New Britain Mayor Timothy T. Stewart; Ansonia Mayor James T. Della Volpe; Hartford Mayor Eddie Perez; Fairfield First Selectman Kenneth A. Flatto; East Hartford Mayor Melody A. Currey; Milford Mayor James L. Richitelli, Jr.; Waterbury Mayor Michael J. Jarjura; Naugatuck Mayor Ron San Angelo; Trumbull First Selectman Raymond B. Baldwin, Jr.; Meriden Mayor Mark Benigni; Weston First Selectman Woody Bliss; Westport First Selectman Gordon E. Joseloff; Darien First Selectwoman Evonne M. Klein; Easton First Selectman William J. Kupinse; Greenwich First Selectman James A. Lash; Stamford Mayor Dannel P. Malloy; Norwalk Mayor Richard A. Moccia; Wilton First Selectman William F. Brennan; Redding First Selectwoman Natalie J. Ketcham; New Canaan First Selectwoman Judy A. Neville; Wilton Superintendent of Schools Gary G. Richards; Weston Superintendent of Schools Lynne B. Pierson; Darien Assistant Superintendent for Secondary Education Stephen V. Falcone; New Canaan Superintendent of Schools David E. Abbey; South Western Regional Planning Agency Executive Director Robert H. Wilson; South Central Regional Council of Governments Executive Director Judy Gott; Greater Danbury Chamber of Commerce President Stephen A. Bull; New London Adult and Continuing Education Director Daniel J. Gaynor; Windham Economic Development Director Ted Montgomery; National Association of Advancement for Colored People Greater Waterbury Branch President Jimmie Griffin; Waterbury Regional Chamber President Stephen R. Sasala, II; Westport Sunrise Rotary President Audrey Sparre; Cable Advisory Council South Central Connecticut Chairperson Susan A. Huizenga; cable advisory council member John Repicky; cable advisory council member Stephen Simonin; Edward R. Savage; and a group of 11 Wilton residents

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received reply comments from: the AG, the A.N.C.C., Cablevision, Charter, Cox, NECTA, the OCC and the Telco.

including Barbara Quincy, Carole and Neil Kleinfeld, Beverly Hood, Al and Linda Schmidt, Theresa Lepoutre, Ann Fiteni, Bettye Ragognetti, Tina Gardner, Peggy Reeves, Karen Birck, Susan Bruschi, and Margaret Creeth.

D. PARTIES AND INTERVENORS

The Department recognized the Southern New England Telephone Company, 310 Orange Street, New Haven, Connecticut 06510; the Office of Consumer Counsel, Ten Franklin Square, New Britain, Connecticut 06051; Cablevision Systems Corp, 1111 Stewart Avenue, Bethpage, New York 11714; New England Cable & Telecommunications Association, 21 Oak Street, Suite 307, Hartford, Connecticut 06106; Cox Communications New England, 170 Utopia Road, Manchester, Connecticut 06040; and Charter Communications Entertainment I, LLC, 11720 Amber Park Drive, Suite 160, Alpharetta, Georgia 30004 as parties to this proceeding. The Department also recognized the Office of the Attorney General and the Area Nine Cable Council as intervenors.

II. INCUMBENT LOCAL EXCHANGE COMPANY VIDEO PRODUCTS

A. SBC

SBC has announced its Project Lightspeed initiative, a $4 billion capital project that it claims will enhance the broadband capabilities of its existing communications network. That initiative will result in, after the initial deployment phase, the addition of 40,000 miles of fiber to SBC's networks and will be an advanced, Internet Protocol (IP)-enabled broadband network extended to approximately 18 million households in SBC's traditional 13-state service territory. This enhancement of SBC's existing Digital Subscriber Line (DSL) broadband networks will enable bandwidths and connection speeds that are not available over existing DSL or cable broadband networks, and will support and integrate an array of voice, data, video and other applications.

Project Lightspeed will involve Fiber-to-the-Node (FTTN) and Fiber-to-the-Premises (FTTP) network technologies. In general, FTTN will be used in existing neighborhoods while FTTP will be used in new developments. In the FTTN configuration, additional fiber will be deployed in the existing network to nodes located within, on average, 3,000 feet or less from homes and businesses. At the node, the Telco will connect the new fiber to the existing copper facilities now serving customers. In the FTTP configuration, since no current service or facilities will be in place, fiber will be deployed directly to the customer premises. Both architectures are expected to employ advanced, next-generation electronics in the network and at the customer premises. Initially, the Telco expects download speeds over FTTN of 20 to 25 Mbps and upload speeds of 1 Mbps to each customer. Connection speeds over FTTP will be substantially higher. According to the Telco, each arrangement will enable a menu of communications, voice, data and video functionalities.

The Project Lightspeed network enhancement is expected, in part, to enable one of the components of SBC's overall video strategy, IP-video. The Telco indicates that this network is fundamentally unlike a traditional one-way broadcast cable network. That is, cable networks transmit the totality of available programming to all households

at the same time, to be unscrambled in the customer's set-top box pursuant to the customer's purchase choices. For IP-video, the Project Lightspeed network will be different, because it will entail a switched, two-way architecture designed to send each subscriber only the programming the subscriber chooses to view at a particular time. This switched system involves: (1) two-way interaction between individual subscribers and SBC; (2) a more tailored "digital feed" to the customer; and (3) more capacity, allowing the Telco to offer a huge range of video on demand (VOD) options, feeds using different camera angles, advanced picture-in-picture viewing, and other tailored programming.

The Telco intends to employ a multi-pronged strategy to compete in the video entertainment segment and offer customers a complete and robust suite of services. Its goal is to be able to offer to all Connecticut consumers a competitive alternative to traditional cable service utilizing a mix of technologies and products.

For example, SBC intends to continue to offer SBC/DISH Network direct broadcast satellite service. In partnership with Echostar, SBC will make available DISH Network service in combination with its other offerings. In this arrangement, the Telco will offer consumers the ability to obtain the full complement of communications services, voice, high-speed Internet access, and video entertainment. The Telco also is expected to continue this effort and offer upcoming enhancements to that service, including new receivers featuring high-definition and standard-definition digital video recording.

Additionally, the Telco intends to launch HomeZone, an entertainment service that combines the capabilities of the DISH Network satellite service with those of SBC's existing DSL broadband networks. These capabilities will come together in the home through the use of a next-generation set-top box that will integrate the satellite-delivered program feed and terrestrial DSL features. This product will be made available to any household that has access to the Telco's existing DSL Internet service.

Lastly, the Telco intends to introduce its Project Lightspeed-enabled services, including IP-video service. The Project Lightspeed network will integrate IP-video with voice, data and other applications (all ultimately to be IP-based) in a manner that is not possible over existing broadband or cable networks. Because the various applications will amount to data packets traveling over the same broadband pipe, the services will interoperate and communicate in a way that makes each service more useful than it would be standing alone.

The video delivery subsystem of SBC's Project Lightspeed has two major components: (1) two redundant super hub offices (SHO) and (2) video hub offices (VHO) in 41 designated market areas across SBC's service territory. Video content will be acquired, processed, encoded and encrypted at the SHO and then distributed via a national, managed IP network to the VHO where local content will be inserted. The content from the VHOs will then be distributed to intermediate offices using another managed IP network; from there the content will be transported to the subscriber's local central office.

Telco July 14, 2005 Video Product Description, pp. 1-4.

B. VERIZON-NY

Through its FTTP initiative, Verizon-NY anticipates enhancing its existing network to provide high-speed telecommunications and information services to residential and business customers, using fiber-optic cable and optical electronics to directly link homes and businesses to its network. The FTTP broadband network will enhance voice and data applications for Verizon-NY's users. In addition, the FTTP network will have the potential to be deployed to provide video services.

At a national or regional level, a "super" headend (SHE) will serve as the single point of national content aggregation. All content will be encoded into MPEG2 streams and transported over nationwide SONET services. In each market where Verizon seeks to offer service, the broadcast cable television traffic will be off-loaded from the long haul network and terminated at a VHO. At general service availability, Verizon will deploy a primary SHE and an additional one will be deployed for redundancy. Network redundancy and route diversity will extend from the SHE to the VHO. Key functions of the SHE will include content reception, signal processing, encoding, and network interface.

The VHO will serve as the metro or local point of aggregation. At that location, off-air and public, education, and government (PEG) channels (where appropriate) will be combined with the broadcast cable television coming from the SHE. Cable television traffic will be converted to optical signals at the VHO and transported over Verizon-NY's metro area, inter-office facilities to Video Serving Offices (VSOs). Voice and high-speed data signals will be combined with the cable television at this location for final transport to the subscriber premises over Verizon's FTTP Passive Optical Network (PON).

At the premises, the optical cable television signal will be de-multiplexed and converted to an electrical signal, which meets cable television industry standards for cable services. Standard home wiring practices, using coaxial cables, as well as alternative media, will distribute the signal to cable-ready TVs and standard set top boxes.

There will be 24x7 control and surveillance of the cable television platform from a remote location. This Network Operations Center will be centrally located and will be responsible for the operation and maintenance of the Conditional Access System, which will direct the encryption functions performed back at the VHO.

The majority of cable television sources will be individual content provider programming. A mix of standard and high definition formats will be supported. All content will be encoded into MPEG2 streams, formatted for SONET, and transported via an OC48c to a local point-of-presence (POP) for wide area transport. In support of cable television service, Verizon will use OC48c SONET facilities in the POPs serving target cable markets. Where multiple POPs exist within a market, redundancy options will dictate if a single POP or multiple POPs will be designated for supporting the cable television traffic. In most cases, it is expected that the cable television traffic will traverse multiple interconnected rings between the SHE and the destination market. Once the cable traffic reaches a POP located in a target market, it will be forwarded to

an OC48c SONET interface connected to metro/local SONET facilities. These facilities will connect the POP to a VHO. VHOs will be capable of serving multiple communities within a target market. If more than one VHO is required, the metro SONET ring(s) will be deployed to cover multiple sites. The VHO will serve as the metro or local point of aggregation.

The VHO will aggregate three basic sources of content: national broadcast channels, local broadcast channels, and PEG channels. The national content will be the traffic sent from the SHE and delivered via an OC48c SONET interface from the SONET POP. The local broadcast channels will be received off-air via antennas or terrestrial fiber transport located at the VHO site. The PEG channels will be collected via terrestrial connections from each local franchising area served by the VHO. Finally, based on Verizon service tiering requirements to support an analog tier, a certain subset of channels will be converted from digital to analog signals at the VHO (or kept in analog format if local or PEG).

The VSO will be a location within the central office containing FTTP equipment. If technically feasible or appropriate, PEG insertion may occur at this location in the network. The key function of the VSO will be to combine broadcast cable television into the Voice and High Speed Data FTTP Network. Once in the VSO, the optical cable television signal will be sent to a Wave Division Multiplexer combiner and splitter, which will be used to add the cable signal to the voice and high-speed data signals' wavelength coming from the Optical Line Terminal, together with the cable wavelength onto a single optical source. This optical signal then will be sent toward the subscriber premises via a PON. The VSO will also play a role in supporting upstream signals from the customer premises for pay-per-view services. Pay per view usage data will use the data service's upstream wavelength. The upstream data communications will be sent back to a subscriber database located in the Operations Center located in the VHO.

At initial deployment, an installation and maintenance technician will connect the Optical Network Terminal (ONT) to a central point of demarcation where a cable television installation and maintenance technician will make final connections to provide the cable television service. After the installation of the ONT, a cable television field technician will test the existing in-home coaxial cable to determine if it is technically acceptable and will connect the service. If no coaxial cable exists or the coaxial cable is unacceptable, the technician will install wiring to the first cable outlet, and will install new coaxial wiring to other locations identified by the customer at the customer's request and expense. The customer may choose to self-install such wiring or to obtain inside wiring installation service from a third party or Verizon.

Verizon-NY July 11, 2005 Video Product Description, pp. 1-8.

III. NOTICE OF WRITTEN COMMENTS AND REPLY COMMENTS

On July 14, 2005, the Department sought written comments from interested persons addressing the offering of video products by SBC and Verizon. In the Notice, the Department also requested written comments in response to the following:

1. Provide comment indicating whether the Verizon/SBC video product meets the definition of cable service as set forth in 47 U.S.C. § 522(6). Provide comment indicating whether the Verizon/SBC video product meets the definition of community antenna television service (CATV) as set forth in Conn. Gen. Stat. § 16-1(a)(15).

2. In light of the Verizon July 11, 2005 and Telco July 14, 2005 responses, specifically indicate how the Verizon/SBC video product delivery system meets the definition of a cable system as set forth in 47 U.S.C. § 522(7) and/or Conn. Gen. Stat. § 16-1(a)(16).

3. List all federal and state franchise requirements generally imposed on companies possessing cable Certificates of Public Convenience and Necessity (CPCNs) in Connecticut pursuant to Conn. Gen. Stat. § 16-331 et seq., including, but not limited to, build out requirements, public access and customer service requirements currently placed on CATV service providers offering cable television service in the state. In light of 47 U.S.C. § 522(6) and Conn. Gen. Stat. § 16-1(a)(15), separately indicate which franchise requirements, if any, would apply to the Verizon/SBC video product.

4. If the Verizon/SBC video product does not satisfy the definition of cable service as set forth in 47 U.S.C. § 522(6) or CATV service as outlined in Conn. Gen. Stat. § 16-1(a)(15), should Verizon/SBC be required to obtain a CPCN before offering that product in Connecticut? Explain.

5. If the Verizon/SBC video product does not satisfy the definition of cable service as set forth in 47 U.S.C. § 522(6) or CATV service as outlined in Conn. Gen. Stat. § 16-1(a)(15), what regulatory requirements, if any, should be placed on Verizon/SBC relative to its video product offering?

6. Some CATV operators have telephony affiliates (e.g., Cablevision Lightpath of CT, Inc.; Comcast Phone of Connecticut, Inc.; and Cox Connecticut Telcom, LLC) offering telephone service in Connecticut at a less restrictive level of state and federal regulation than that imposed on incumbent providers. If the Verizon/SBC video product does not satisfy the definitions outlined in 47 U.S.C. § 522(6) and Conn. Gen. Stat. § 16-1(a)(15), discuss whether Verizon/SBC should be afforded the same less restrictive regulatory treatment. List all reporting requirements that Verizon/SBC should be subject to relative to its video service product.

7. Provide comment indicating whether the Verizon/SBC affiliate that would offer the video product meets the definition of multichannel video programming distributor as outlined in 47 U.S.C. § 522(13).

8. Compare and contrast the Verizon/SBC video product to that offered by direct broadcast satellite (DBS) service providers. Describe the level of federal and state regulation and requirements currently imposed on DBS providers. Should Verizon/SBC be afforded the same level of regulatory treatment as that imposed on DBS service providers? Explain.

9. In light of the Verizon July 11, 2005 and Telco July 14, 2005 responses, separately list all FCC orders, rulings, etc. supporting the position that the Department is preempted from regulating the Verizon/SBC video product. Separately discuss the effect, if any, the recent Supreme Court Decision in National Cable & Telecommunications Association et al v. Brand X Internet Services et al and Federal Communications Commission and United States v. Brand X Internet Services et al (*Brand X*) would have on the Department's regulation of the Verizon/SBC video product. Compare and contrast this level of Department regulation with that currently imposed by the Department on other Internet service-related/broadband products (e.g., Internet dial-up access, Cable Modem Service, Digital Subscriber Line Service, regulation of Internet Service Providers, etc.).

10. If the Verizon/SBC video product does not invoke the Department's jurisdiction over that offering, should an informational filing be made with the Department describing the prospective service? Explain. If yes, provide the information that should be included in the filing (e.g., geographic area to be served, services offered, rates, customer service plan, etc.).

Notice, pp. 1-4.

IV. POSITIONS OF PARTIES AND INTERVENORS

A. A.N.C.C.

The A.N.C.C. is a proponent of competition in the cable arena and supports the "Level Playing Field" doctrine. The A.N.C.C. comments that its goal is to secure with SBC the benefits that it has enjoyed with Cablevision on behalf of its community. These benefits include, but are not limited to, community access[4] funding and studios, discrete town specific educational and governmental access channels, equipment and cash grants and frequent and cooperative dialogue with senior management. A.N.C.C. Written Comments, p. 2.

B. AG

The AG recommends that the Department encourage and foster a competitive market for video services. The AG also suggests that competitive video services utilize state of the art technology, offering a wide range of programming and pricing options. The AG further suggests that the Department issue statewide franchises which require competitive video service providers to offer a basic service package consisting of local, governmental and educational programming, affordable to all consumers; make their video services available to all state residents and state businesses, regardless of geographic location; and make their video services available to all Connecticut residents on a stand alone basis with no buy-through requirement. AG Written Comments, pp. 1 and 4; AG Reply Comments, pp. 1, 2, 4 and 5.

4 Also referred to as "PEG," or public, educational, and governmental access.

Additionally, the AG maintains that the record in this case appears to be inadequate to allow the Department to fully and fairly investigate and address all of the issues that may be presented in this case. Accordingly, the AG has proffered a preliminary list of issues that it suggests be addressed in this proceeding. These issues include the specific nature of the video service that the ILECs intend to provide and how, if at all, it differs from the video service that is presently offered by Connecticut's CATV companies. The AG offers that the manner of video programming or information that will be provided and the level of subscriber interaction that will be required or available should be reviewed during this proceeding. The AG also advocates Department review of what channels will be available to customers and how, if at all, they will be packaged and marketed. The AG questions which Connecticut consumers will be able to receive the video services and whether the ILECs will serve all consumers or only those in certain geographic areas.

The AG further suggests that the nature of the technology that will be used by the ILECs to deliver the video service be investigated. For example, the type(s) of lines or cable technology that will be used to deliver the video product, either to the node or to the home should be reviewed. Also, the type of equipment that will be required to deliver video service, and where that equipment will be physically located. Moreover, the AG suggests that the Department review the equipment that would be required in the customer's home and whether it will be used only for video purposes. AG Written Comments, pp. 4-6; AG Reply Comments, pp. 2-4.

Lastly, the AG comments that absent from the Telco's "public interest considerations" are any commitment or intention to provide video services to every Connecticut consumer, without limitations based on economic circumstances or geographic boundaries. The AG notes that the Telco has not indicated whether it will offer a basic level of its video service to customers in the state at a reasonable rate. In the opinion of the AG, this demonstrates the need for the Department to issue statewide franchises for such competitive video services. AG Reply Comments, p. 6.

C. CABLEVISION[5]

Cablevision argues that the SBC and Verizon video products are cable services and that the Department may not exempt them from local franchising and other requirements that apply to cable service. Cablevision also argues that the Department cannot exempt SBC or Verizon from Title VI local franchising or other requirements unless it has concrete evidence that their video offerings do not meet the "cable service" and "cable system" definitions established by federal and Connecticut law. In the opinion of Cablevision, there is no factual or legal support for SBC's position that its video offering falls outside franchising requirements. According to Cablevision, the FCC has exclusive jurisdiction over interstate services such as video programming, and State and local governments have no unilateral authority to create an "IP-video" exception to Title VI.

Cablevision claims that it is widely acknowledged that SBC cannot meet its goal

5 Cablevision has incorporated into its comments, the NECTA August 23, 2005 written comments. Cablevision Written Comments, p. 1.

of competing directly with cable company products without securing deals with key broadcast and cable programming channels, so its service will have to contain video programming. If SBC offers any conventional cable or broadcast channels (ABC, ESPN, CNN, HBO), Cablevision asserts that SBC is offering cable service subject to local franchising requirements. Moreover, Cablevision argues that use of IP technology as part of a delivery platform does not affect the characterization of video programming delivery as a cable service.[6] Cablevision disagrees with SBC's claim that it should be allowed to avoid cable franchising because it will transmit video programming in an IP format since it is a radical departure from current law. Cablevision also states that the FCC has never suggested that the transmission format of video content is important to the classification of video programming. Cablevision Written Comments, pp. 4-7; Cablevision Reply Comments, pp. 1 and 2.

Additionally, Cablevision contends that the SBC and Verizon networks fall within the definitions of a cable system under federal law and a community antenna television system under Connecticut law. This is because pursuant to the Communications Act of 1934 (Communications Act), a cable system is defined as a facility, consisting of a set of closed transmission paths and associated signal generation, reception and control equipment that is designed to provide cable service which includes video programming that is provided to multiple subscribers within a community. Based on SBC's proposed network architecture, Cablevision contends that those facilities are a cable system regardless of the transmission technology. While noting that there are limited exceptions under the Communications Act, Cablevision argues that SBC has not established that its network meets the requirements for those exemptions. Cablevision further argues that based on public reports, SBC will use public rights-of-way to deliver its services and that its network will not be used solely to provide interactive on-demand services. Therefore, the SBC network will qualify as a CATV system under Connecticut law. Cablevision Written Comments, pp. 7 and 8.

Moreover, Cablevision claims that SBC has not provided any information that would allow the Department to conclude that its proposed video offering is anything other than cable service. In the opinion of Cablevision, since the SBC video product will contain at least some cable or broadcast programming, the Department will be able to determine that it is not a cable service without more information regarding its proposed program service offerings and packages. Therefore, Cablevision suggests that the video product be regulated subject to Title VI. Cablevision Written Comments, p. 8-10; Cablevision Reply Comments, p. 2.

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6 The Telco maintains that its IP-enabled video service and other video distribution services that entail the same or similar features fall squarely within the FCC's analysis in its order In re: Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, Memorandum Opinion and Order (Vonage Order), 19 FCC Rcd 22404 (2004). According to the Telco, in that order, the FCC preempted state regulation of Vonage's voice over Internet Protocol (VoIP) service and further determined that any other IP-enabled service with certain basic characteristics would likewise not be subject to state regulation. These characteristics are: (1) a requirement for a broadband connection from the user's location; (2) a need for IP-compatible customer premises equipment; and (3) service functionality that includes a suite of integrated capabilities and features, able to be invoked sequentially or simultaneously, that allows customers to manage personal communications dynamically, including enabling them to originate and receive voice communications and access other features and capabilities, even video. The Telco contends that its IP-video service meets all these criteria. Telco Reply Comments, p. 16.

Cablevision argues that the public interest does not support exempting SBC from state cable franchising and regulatory requirements. Nor is it persuaded by the argument that the state's cable franchising requirements will defer investment or competitive entry. Cablevision cites to the fact that Connecticut already offers the ability for providers to receive one statewide franchise that Verizon and SBC have argued in other states enables competitive entry. Cablevision also cites to the fact that SNET Personal Vision (SPV) was able to procure a cable statewide franchise in nine months. Cablevision Written Comments, pp. 10 and 11.

Additionally, while noting that federal and State law contain provisions designed to ensure that consumers are not denied access to cable service due to income or other demographic characteristics, Cablevision references the SBC statements that it does not want to wire entire towns and its plans to target 90% of high-spending customers, 70% of middle-value subscribers and 5% of low-value consumers. Cablevision also references SBC's plans to focus almost exclusively on affluent neighborhoods. Cablevision maintains that absent Department review of SBC's construction and network deployment plans in the context of the cable franchising process, as well as ongoing oversight of its network build-out via federal and State anti-redlining provisions, there will be no authority to ensure that SBC's service is rolled out in accordance with the law. Cablevision Written Comments, pp. 11 and 12.

Cablevision further maintains that Connecticut law ensures that cable television service is furnished in a manner which reflects and responds to community needs and unique local circumstances by directing that a needs assessment be performed prior to issuance or renewal of cable franchises and requiring operators' ongoing interaction with, and input from, local advisory councils. In the opinion of Cablevision, a needs assessment and advisory council oversight would be helpful because SBC has provided little detail regarding its proposed cable offering and is constructing and deploying its cable system prior to obtaining a franchise. A needs assessment report could also serve as an "early warning" system regarding the suitability of SBC's proposed system design and service offering for a particular community. Cablevision asserts that bypassing that process increases the likelihood that SBC's system design, service area, and service offering will be presented as an unalterable *fait accompli*, precluding meaningful public participation and community input. Cablevision Written Comments, p. 13.

Relative to PEG access programming, Cablevision claims that state law requires the provision of facilities, equipment, and technical and managerial support to enable the production of community access programming and that cable operators must set aside channel capacity to be used for that purpose. Cablevision states that SBC seeks to avoid these responsibilities to gain an unfair competitive advantage. Cablevision also states that cable operators' ability to continue to provide capital and resources to support robust community access programming operations will be jeopardized if SBC is allowed to sidestep PEG obligations. Cablevision Written Comments, p. 13.

Moreover, Cablevision notes that Connecticut CATV companies are subject to a broad array of specific consumer protection and customer service requirements as well as ongoing oversight by the Department to ensure compliance with the service provision

requirements in their franchise agreements. Ensuring such protections might be important as SBC may be encountering technical problems with some of the putatively distinctive characteristics of its video network. Cablevision suggests that the Department monitor SBC's technical trials to ensure that it has an accurate and up-to-date understanding of issues that may affect SBC's network deployment plans and video service capabilities. Cablevision Written Comments, p. 14.

Lastly, Cablevision suggests that Connecticut's level playing field statute requires regulatory parity regarding the terms and conditions under which new competitors enter the cable marketplace. Cablevision also suggests that granting SBC's request would provide SBC with an extraordinary economic and regulatory advantage over its competitors that would not be in the public interest. Cablevision Written Comments, p. 15.

D. CHARTER[7]

Charter argues that SBC should not be permitted to avoid its legal obligations under the guise of providing IP-video. Charter suggests that the Department should be concerned with the policy implications of SBC's corporate focus of its video deployment to "high value" customers. In the opinion of Charter, this approach is a direct affront to the Department's longstanding policies and to Charter's commitments to serve its franchise areas without regard to density. To disregard NECTA's legal and policy analysis would result in turning the entire policy of universal service on its head. Charter asserts that under no circumstances can any franchised cable operator be expected to construct plant in uneconomic portions of its franchise areas if the Department ignores its commitment to universal cable service principles and other franchising requirements. Nor, as demonstrated by SPV, can the Department expect that the ILECs would ever build out facilities to serve uneconomic areas, as Charter and other cable operators have done. Charter Written Comments, pp. 2-5.

Charter also notes that the Department maintains rigorous regulatory oversight of cable systems and operations. Charter states that it has made considerable efforts to comply with the myriad of requirements set forth in state statutes, regulations, Department orders and franchise agreements. Charter concludes that there is no justification to exempt new entrants into the video marketplace from abiding by Connecticut's regulatory rules.

In the opinion of Charter, SBC's entry into the video business without a franchise would render meaningless the telephone and customer service compliance standards that have been in place in Connecticut since 1988. Any attempt by an ILEC "overbuilder" to persuade the Department to ignore the Connecticut cable regulatory scheme would be in derogation of important consumer protections. Under no circumstances should these requirements be applied only on the basis of the identity of the provider. Charter suggests that video services provided over facilities using the public right-of-way deserve the same level of regulatory protection. Charter Written Comments, pp. 5-7.

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7 Charter supports and incorporates into its written comments, the NECTA August 23, 2005 written comments. Charter Written Comments, p. 2.

In addition, Charter claims that it has endeavored to be an industry leader in the deployment of advanced and interactive services, including those that involve interactivity with video programming. Charter's current experience indicates that video customers are much more focused on high-definition service (HDTV) and digital video recorders (DVR), than other interactive features. Charter further claims that it has been offering several services with advanced interactive features, including its WorldGate Internet access service and Wink service. Charter concludes that the Project Lightspeed features will differ little from those already available to customers in its Connecticut franchise areas. To the extent that SBC's deployment of video and video-related services qualify as innovative services involving "technologically advanced" facilities, Charter suggests that the Department is required to review and regulate them pursuant to Connecticut statutes. Charter Written Comments, pp. 7 and 8.

Lastly, Charter requests that the Department require the Telco and any of its affiliates offering a video product to obtain a franchise consistent with Connecticut law prior to providing cable service. Charter Reply Comments, pp. 2 and 3.

E. Cox[8]

Cox supports the development of a more competitive marketplace in services delivered over a broadband platform. While Cox believes that it is vitally important to the Connecticut broadband market that neither SBC nor Verizon be permitted to evade the franchising process and regulatory requirements that currently apply to cable television operators, it should not be construed as support for continuation of the current regulatory scheme as it applies to Cox, as a cable operator. As long as cable television operators such as Cox are subject to franchising and related regulatory requirements, then the same regulatory scheme must apply to ILECs and their affiliates seeking to enter the video services business. Cox August 23, 2005 Written Comments, pp. 1 and 2.

Cox also notes that the Department is without jurisdiction to offer a definitive ruling that the Telco may provide its video service without a franchise issued consistent with Conn. Gen. Stat. §16-331(a). Cox therefore suggests that the Department close this proceeding without prejudice until such time as the Telco obtains a ruling from the FCC that supports the Telco's legal theory. In the opinion of Cox, the Department has neither the statutory authority nor the discretion to exempt the Telco from the franchising requirements of 47 USC § 541(b) by ruling that these requirements do not apply to SBC. Cox Reply Comments, pp. 2 and 3.

F. NECTA

1. General Comments

Based on the SBC and Verizon platform filings and public statements, NECTA is of the opinion that each company separately plans to offer high quality video services

8 Cox supports and incorporates into its written comments, the NECTA August 23, 2005 written comments. Cox August 23, 2005 Written Comments, p. 2.

that are comparable to and fully competitive with the NECTA member companies' video offerings. According to NECTA, the provision of video programming is a touchstone for federal and state cable television regulation, assuming other requirements for cable services or systems are present, such as having facilities that cross public rights-of-way and offering services to subscribers. NECTA states that SBC and Verizon easily qualify under these definitions. NECTA Written Comments, pp. 5-10.

NECTA also states that federal and state statutes provide that common carrier facilities used to deliver video programming must qualify as cable systems to the extent that they are used in the transmission of video programming to customers. These classifications apply irrespective of the particular technology or platform used to deliver them. Thus, the proposed ILEC video services are cable services subject to franchising and other regulatory requirements. If SBC and Verizon choose not to abide by the regulatory requirements applicable to cable service, NECTA suggests that they are free to qualify for a less regulated form of video services, such as an Open Video System (OVS). Id.

In addition, NECTA contends that Verizon and SBC understand that their video services are properly classified as cable services. NECTA cites as an example, Verizon's attempt to secure cable franchises from local franchising authorities. In those franchise areas, Verizon has committed to offering cable services, meeting public access obligations, complying with universal build out requirements and offering service packages and components commonly used in cable services such as an analog tier (including access channels), digital tiers, premium service tiers, pay-per-view, HDTV, digital music channels, DVRs, interactive program guides, and inside cable wire installations. NECTA notes that the cable-based nature of Verizon's proposed video offering is also evident throughout the Verizon Platform Filing. Id.

NECTA further contends that SBC has attempted to bypass Title VI by petitioning the FCC for a ruling that its video services should be regulated exclusively under Title I of the Communications Act. According to NECTA, the FCC did not accept SBC's arguments and dismissed its petition on procedural grounds. In this proceeding, SBC glosses over the legal analysis showing that the Communications Act and state laws do not permit SBC to evade regulation as a cable operator. Id.

NECTA is also of the opinion that the SBC platform filing describes a network that appears materially identical to a modern cable network. NECTA states that the switched video attributes hold the potential for greater bandwidth efficiency and allow for additional interactive applications. But, they represent only an advancement in the technologies employed to facilitate "subscriber interaction" with the "video programming" to be delivered to the set or monitor.[9] NECTA notes that Time Warner and other cable operators are actively testing the same technologies. Accordingly, a Department ruling

9 The Telco maintains that its Project Lightspeed network is different in that it entails a switched, two-way client server IP-based architecture designed to send each subscriber only the programming the subscriber chooses to view at a particular time. According to the Telco, because all services provided over the network are IP-based, subscribers will be able to tailor and integrate much of the voice, video and data content. Telco Reply Comments, p. 14.

deregulating SBC or Verizon on the basis of these attributes will almost certainly be followed by similar requests for relief from existing cable operators. Id.

NECTA also notes that Title VI recognizes the importance of new entrants in the cable marketplace, but it does not exempt them from all regulatory requirements. Instead, it provides opportunities for reduction of certain regulatory responsibilities for new cable operators while maintaining the critical requirements to support key social goals and responsibilities. NECTA suggests that Title VI also allows for alternative regulatory regimes for entering into video markets if the operator elects not to subject itself to the many requirements applicable to cable services. Title VI does not however, permit new entrants to offer video programming and escape regulation in its entirety.

In addition, NECTA states that Congress established the modern federal framework for ILEC-provided video services in 1996 offering at least five options for entering the video business including the transmission of video programming on a common carrier basis; undertaking radio-based operations; operating an OVS; operating under Title VI or partnering with satellite providers to offer DBS programming.[10] NECTA Written Comments, pp. 10-12; NECTA Reply Comments, p. 11.

Besides requiring that Verizon and SBC video products be offered pursuant to a CATV franchise, NECTA also recommends that the Department address when they should be required to obtain their franchises. NECTA claims that the incumbent LEC video platform filings are insufficiently detailed to conclusively determine which network elements should be attributed to video operations and installed only pursuant to a cable franchise. NECTA maintains that the Department is required to review and affirm the ability of SBC and Verizon to construct, operate and maintain their planned networks with video capabilities and the characteristics of their networks, including the size and safety features of the video and communications equipment in the hub, remote terminal and node locations. NECTA Written Comments, pp. 13 and 14.

NECTA further disagrees with Verizon and SBC that federal and state regulatory requirements are barriers to their entry into video markets and serve no other purpose. NECTA is of the opinion that Verizon and SBC ignore federal and Connecticut policies.

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10 The Telco claims that NECTA misreads the law because nothing in that provision expressly limits the provision of video programming by a telecommunications carrier to the four means enumerated in the provision. The Telco also states that nothing in the legislative history of section 571 indicates that Congress intended to limit the provision of video services by telecommunications carriers to those enumerated above. The Telco contends that there is no reason for the Department to interpret these means of providing video services as being the only manner by which telecommunications carriers may do so. In the opinion of the Telco, section 571 is designed to place limits on the regulation of telecommunications carriers providing video services to spare them from being treated as cable operators. Finally, the Telco argues that section 571(a)(3)(A) merely provides that if a common carrier is not providing video over a radio-based system or by common carriage (and is not an OVS provider), that carrier would be subject to the requirements of that title. It does not provide that such a carrier is necessarily a "cable operator." According to the Telco, it has not taken the position that, in offering IP-enabled video, it is not subject to any of the requirements of Title VI. Rather, as a MVPD, it will be subject to the Title VI obligations applicable generally to other MVPDs. It would not, however, be subject to the Title VI obligations applicable to "cable operators." Telco Reply Comments, pp. 22-24.

According to NECTA, there are many core principles which support regulation of ILEC video services as cable services. NECTA Written Comments, pp. 14-26.

In response to the Notice request for information on the regulatory schemes of satellite-delivered video, competitive local telephony and unregulated Internet services, NECTA claims that this request is immaterial because the SBC and Verizon offerings are "video programming" and "cable services" and therefore, these regulatory approaches are inapplicable. NECTA maintains that the Department has no discretion to ignore state and federal requirements imposed on video service providers absent a change in applicable law. NECTA notes that Congress and the FCC have created different legal and regulatory schemes applicable to these non-cable services because of the regulatory history of each service, the technologies and the policy goals for each service vary. Consequently, it would defy law and logic to make like comparisons to these inapplicable regulatory schemes to the video services of SBC and Verizon.

Additionally, NECTA argues that as local telephony is a common carriage service, the federal and Connecticut regulatory schemes have evolved to impose differential regulatory schemes on market entrants. All market entrants are charged with complying with a common level of regulation as a means of ensuring that the public interest is protected (e.g., E911 service, CALEA compliance, Universal Service Fund contributions, Intercarrier Compensation participation, etc.). Further, the state has permitted deregulation of certain services based on the level of competition in the market for that service. Variations in the regulatory regime for local exchange companies (LEC) are predicated, at least in part, on that particular LEC's level of responsibility in maintaining the public switched telecommunications network, the degree to which certain services are deemed competitive and its ability to control competitors through use of bottleneck facilities.

NECTA asserts that no such public policy objectives exist with respect to cable television. Local franchising was not created to protect competitors and/or the development of markets for a previously monopolized service. Rather, it is aimed at meeting local cable-related needs and ensuring that all market entrants meet minimum service requirements and make reasonable payments for use and maintenance of the public rights-of-way. Moreover, in contrast to LEC control over bottleneck facilities, local cable television companies do not control a single facility essential to the development of video competition. Accordingly, as SBC and Verizon enter video markets, NECTA suggests that they be held to the same standards as cable operators entering local telephony markets; namely, complying with all applicable video obligations with respect to video offerings and all applicable telecom obligations on their local telephone offerings.

Moreover, NECTA claims that in *Brand X*, the United States Supreme Court affirmed the FCC's classification that cable modem service is classified as a Title I information service delivered via telecommunications rather than a telecommunications service subject to Title II common carrier obligations. NECTA notes that in response to *Brand X*, the FCC declared that ILEC-offered Internet services delivered via DSL technology also will be similarly regulated as Title I information services. In the opinion of NECTA, video programming that meets the requirements of a cable service is regulated under Title VI irrespective of the technology used to deliver it to the home.

Such treatment fully comports with the ILEC emphasis regarding regulatory parity for like services. NECTA Written Comments, pp. 27-30.

Lastly, NECTA suggests that the Department investigate during this proceeding when Verizon and SBC need to obtain a franchise. According to NECTA, comments filed by other parties provided no grounds for allaying concerns that Verizon and SBC may be engaging in construction activities without proper authorization, contrary to federal law and state law. NECTA states that Verizon only agrees to seek a franchise at some unspecified future date and does not provide assurances that its construction activities will comply with applicable laws. NECTA also claims that Verizon fails to disclose that it appears to have commenced construction of its FiOS network, creating the possibility that it will engage in impermissible construction activities to the detriment of existing cable operators and municipalities. Notwithstanding Verizon's protestations to the contrary, NECTA suggests that the Department investigate and confirm that Verizon is remaining within the bounds of lawful pre-franchise construction in Connecticut. NECTA also recommends that the Department establish similar principles to guide the future activities of SBC.[11] NECTA Written Comments, pp. 13 and 14; NECTA Reply Comments, pp. 16 and 17.

2. NECTA Comments filed in response to the Notice

Question 1. Provide comment indicating whether the Verizon/SBC video product meets the definition of cable service as set forth in 47 U.S.C. Section 522(6). Provide comment indicating whether the Verizon/SBC video product meets the definition of community antenna television service (CATV) as set forth in Conn. Gen. Stat. § 16-1(a)(15).

a. SBC

NECTA claims that SBC's video product meets the definition of a cable service because it will provide for the one-way transmission of video programming. NECTA disagrees with the SBC claim that the Project Lightspeed architecture is two-way

11 The Telco disagrees with NECTA and argues that it does not plan on building a cable system; it already operates and plans to continue operating its communications network. According to the Telco, through Project Lightspeed it is upgrading its existing communications network to allow it to provide Connecticut consumers a complete suite of services. The Telco also states that in the case of its IP-enabled video service, the rights-of-way premise for municipal franchise regulation is inapplicable. In addition, the Telco complies with rights-of-way protections and rules in deploying its new fiber and fiber-related facilities, and the fact that these facilities will carry some video services will in no way increase or even change the burden on the rights-of-way. Further, non-imposition of incumbent cable franchising requirements will not in any way usurp the current authority of municipalities to require permits each time telecommunications carriers seek to cut pavement or lay fiber or do any other construction; to require payment of applicable excavation and right-of-way management fees; and to ensure compliance with public safety and traffic requirements for right-of-way projects. In the opinion of the Telco, the absence of a cable franchise will in no way detract from municipalities' ongoing rights to manage telecommunications carriers' use of the local rights-of-way. Imposing a cable franchise is not necessary to protect those rights-of-way; rather, it would be entirely duplicative and unjust as cable providers need not obtain a CPCN to provide VoIP services over their existing cable networks. Moreover, IP-enabled video service will not impose any incremental burden on public rights-of-way. Interpreting the language of Title VI to require additional barriers to entry would not serve the underlying purpose of the franchise requirements of Title VI. Telco Reply Comments, pp. 24-30.

because subscribers will have the ability to interact with the service to select specific video product options.[12] According to NECTA, this does not differ from "traditional" cable service which permits subscribers to use their remote controls/set top boxes to select various options (such as pay-per-view programming or DVR actions). NECTA argues that SBC's video subscribers will not be transmitting video programming back to SBC. Rather, they will simply be making selections with respect to various services and video options of their choosing, including traditional programming (broadcast) and cable, video-on-demand or the more advanced applications such as previewing. NECTA Written Comments, pp. 31-33.

NECTA also states that in light of the federal definition of "subscriber," SBC will be offering its video product to the general public passed by its upgraded network. The network will be extended to approximately 18 million households in SBC's traditional 13-state service territory. Id.

Additionally, NECTA maintains that the SBC video product will provide programming comparable to that provided by a television broadcast station and that SBC will be obtaining programming from many of the same programming providers used by existing cable providers. SBC has given no indication it will offer a degraded picture quality over the general Internet that have fallen short of quality needed to be video programming. Finally, SBC's video product will allow for subscriber interaction to select from various video programming options and services. Id.

NECTA further asserts that the SBC video product meets the Connecticut definition of CATV service, because it constitutes the one-way transmission of video programming, with subscriber interaction. Moreover, there is no indication that SBC will limit availability of its video product to only limited classes of subscribers or to certain persons in its service territory. Thus, it will be available to all subscribers generally. Id.

b. Verizon

NECTA contends that Verizon's video product meets the definitions of cable and CATV services in federal and state statutes for the same reasons as SBC's product. Verizon's video product will provide programming comparable to that provided by a television broadcast station. NECTA cites to the Verizon July 11, 2005 filing wherein it refers to cable television traffic and the optical cable television signal that will be de-multiplexed and converted to an electrical signal, thus meeting cable television industry standards for cable services. NECTA claims that Verizon has already negotiated carriage agreements with various cable networks and announced the launch of several new networks. Lastly, NECTA notes that Verizon's video product will also include local broadcast channels. NECTA Written Comments, p. 51.

Question 2. In light of the Verizon July 11, 2005 and Telco July 14, 2005 responses, specifically indicate how the Verizon/SBC video product delivery

12 The Telco argues that it is precisely this two-way interactive aspect of the service that, from a Title VI classification perspective, distinguishes IP-enabled video from cable service. The two-way interactive aspect of the service will allow the Telco to provide unique features to its voice, video and data services. Telco Reply Comments, pp. 17 and 18.

system meets the definition of a cable system as set forth in 47 U.S.C. Section 522(7) and/or Conn. Gen. Stat. §16-1(a)(16).

a. SBC

NECTA argues that SBC's video product delivery system meets the definition of a cable system because it will be provided over a facility consisting of a set of closed transmission paths and associated signal generation, reception and control equipment.[13] NECTA maintains that even though SBC's video product will be provided over a network with IP elements, it does not change the fact that SBC will be providing a cable service over a cable system and will be operating as a cable company. According to NECTA, neither the federal nor state definitions of "cable system" or related service such as "video programming" or "call services" carve out an exception for networks with IP-based elements.

NECTA also argues that federal law provides that common carriers regulated under Title II of the Communications Act must be regulated as cable companies unless their video product is wireless or they are an OVS provider. NECTA claims that the fact that SBC's video product will be delivered over the facility of a common carrier does not exempt the system from the definition of a cable system under federal law. To the contrary, because the Project Lightspeed facility will be used in the transmission of video programming directly to subscribers, it falls into the definition of a cable system. Further, pursuant to 47 U.S.C. § 571, video programming delivered by a common carrier is to be regulated as a cable service unless it qualifies for alternative regulatory status as a Title III MMDS wireless video service or as an OVS. NECTA Written Comments, pp. 34-37.

Relative to Connecticut law, NECTA argues that SBC's video product delivery system meets the definition of a cable system because Project Lightspeed will consist of a set of closed transmission paths and associated signal generation, reception and control equipment that is designed to provide CATV service. In the opinion of NECTA, because video programming means provided by, or generally considered comparable to programming provided by a television broadcast station, it is the same definition and has the same scope as the federal definition. Id.

Moreover, since SBC's video product will be provided over its existing network (with some enhancements), NECTA notes that the network crosses the public right-of-way. SBC will also offer its video product to Connecticut customers for a fee. Therefore, NECTA concludes that SBC will offer its video product for hire. Id.

Relative to the definition of "subscriber," NECTA states that SBC will be offering its video product to multiple subscribers within a community and franchise. Finally, NECTA notes that the Connecticut statutory provisions are identical to the federal

13 The Telco argues that a "cable system" is defined by the Cable Act as a "facility . . . that is defined to provide cable service." According to the Telco, Project Lightspeed is designed to provide a very different service than incumbent "cable service." The Telco contends that by definition, its network cannot be a "cable system." Telco Reply Comments, p. 21.

provisions discussed above, except there is no Connecticut counterpart to the common carrier-specific provision in 47 U.S.C. § 571. Id.

b. Verizon

NECTA maintains that Verizon's video product meets the definitions of cable and CATV systems in federal and state statutes for the same reasons provided in response to question 1. While noting that Verizon plans to enhance its existing network to deploy FTTP technology and that a "super" headend will serve as the single point of national content aggregation, NECTA argues that the Verizon system is designed to provide cable service. NECTA Written Comments, p. 52.

Question 3. List all federal and state franchise requirements generally imposed on companies possessing cable Certificates of Public Convenience and Necessity (CPCNs) in Connecticut pursuant to Conn. Gen. Stat. § 16-331 et seq., including, but not limited to, build out requirements, public access and customer service requirements currently placed on CATV service providers offering cable television service in the state. In light of 47 U.S.C. Section 522(6) and Conn. Gen. Stat. § 16-1(a)(15), separately indicate which franchise requirements, if any, would apply to the Verizon/SBC video product.

In response to question 3, NECTA provided a detailed listing of federal and state statutory requirements. These included, but were not limited to, build out requirements, public access requirements, customer service requirements, notification requirements, filing requirements, signal carriage requirements and construction and safety standards that it suggested would apply to the SBC and Verizon video products.

NECTA states that as SBC and Verizon would be the new entrants in their respective service territories, they would be subject to effective competition for purposes of rate regulation under 47 U.S.C. § 543 and they would be exempted from several regulatory requirements including basic tier and equipment rate regulation and uniform rate requirements in those areas. NECTA Written Comments, pp. 38-43, 53.

Question 4. If the Verizon/SBC video product does not satisfy the definition of cable service as set forth in 47 U.S.C. Section 522(6) or CATV service as outlined in Conn. Gen. Stat. § 16-1(a)(15), should Verizon/SBC be required to obtain a CPCN before offering that product in Connecticut? Explain.

NECTA maintains that the SBC and Verizon video products are cable services/CATV services under applicable federal and state law; and therefore, this question is not applicable. NECTA Written Comments, pp. 44, 54.

Question 5. If the Verizon/SBC video product does not satisfy the definition of cable service as set forth in 47 U.S.C. Section 522(6) or CATV service as outlined in Conn. Gen. Stat. § 16-1(a)(15), what regulatory requirements, if any, should be placed on Verizon/SBC relative to its video product offering?

NECTA states that the SBC and Verizon video products are cable services/CATV services under applicable federal and state law; and therefore, this question is not applicable. NECTA Written Comments, pp. 45, 55.

Question 6. Some CATV operators have telephony affiliates (e.g., Cablevision Lightpath of CT, Inc.; Comcast Phone of Connecticut, Inc.; and Cox Connecticut Telcom, LLC) offering telephone service in Connecticut at a less restrictive level of state and federal regulation than that imposed on incumbent providers. If the Verizon/SBC video product does not satisfy the definitions outlined in 47 U.S.C. Section 522(6) and Conn. Gen. Stat. § 16-1(a)(15), discuss whether Verizon/SBC should be afforded the same less restrictive regulatory treatment. List all reporting requirements that Verizon/SBC should be subject to relative to its video service product.

NECTA contends that the SBC and Verizon video products are cable services/CATV services under applicable federal and state law; and therefore, this question is not applicable. NECTA also suggests that SBC and Verizon be subject to the same reporting and other requirements applicable to cable operators.

Additionally, NECTA asserts that cable companies offering circuit switched telephony do so as regulated CLECs and are subject to existing federal and state law pursuant to the Telecommunications Act of 1996 (Telcom Act). ILECs that offer video programming and cable services also are subject to existing federal and state regulation designed for ILEC entry as set forth in the Telcom Act. NECTA Written Comments, pp. 46 and 56.

Question 7. Provide comment indicating whether the Verizon/SBC affiliate that would offer the video product meets the definition of multichannel video programming distributor as outlined in 47 U.S.C. Section 522(13).

According to NECTA, the SBC and Verizon affiliates qualify as cable operators, one of the entities classified as a MVPD under 47 U.S.C. § 522(13). NECTA Written Comments, pp. 47, 57.

Question 8. Compare and contrast the Verizon/SBC video product to that offered by direct broadcast satellite (DBS) service providers. Describe the level of federal and state regulation and requirements currently imposed on DBS providers. Should Verizon/SBC be afforded the same level of regulatory treatment as that imposed on DBS service providers? Explain.

NECTA claims that DBS regulation is inapplicable to the SBC and Verizon video services as a matter of law and of regulatory policy. NECTA Written Comments, pp. 48 and 58.

Question 9. In light of the Verizon July 11, 2005 and Telco July 14, 2005 responses, separately list all FCC orders, rulings, etc. supporting the position that the Department is preempted from regulating the Verizon/SBC video product. Separately discuss the effect, if any, the recent Supreme Court Decision in National Cable & Telecommunications Association et al v. Brand X Internet

Services et al and Federal Communications Commission and United States v. Brand X Internet Services et al (*Brand X*) would have on the Department's regulation of the Verizon/SBC video product. Compare and contrast this level of Department regulation with that currently imposed by the Department on other Internet service-related/broadband products (e.g., Internet dial-up access, Cable Modem Service, Digital Subscriber Line Service, regulation of Internet Service Providers, etc.).

NECTA is not aware of any orders precluding or preempting the Department from regulating the SBC and Verizon offerings as a cable service. NECTA states that *Brand X* has no impact on regulation of their video services because they involve services that meet the qualifications for the offering of virtually unregulated information services under Title I of the Communications Act. The SBC video services qualify as Title VI cable services rather than Title I information services. NECTA Written Comments, pp. 49, 59.

Question 10. If the Verizon/SBC video product does not invoke the Department's jurisdiction over that offering, should an informational filing be made with the Department describing the prospective service? Explain. If yes, provide the information that should be included in the filing (e.g., geographic area to be served, services offered, rates, customer service plan, etc.).

NECTA claims that this question does not apply to either the SBC or Verizon video products. NECTA Written Comments, pp. 50 and 60.

G. OCC

While acknowledging the LECs' concurrence that any new approach to video franchising must include some safeguards for local interests, the OCC suggests that any developed solution include obligations imposed on any entity providing television via any means of transmission. These obligations include issues related to the red-lining of neighborhoods, build-out of infrastructure requirements, local advisory boards, and ample public access to facilities and broadcast time on the cable operators' schedules. OCC Written Comments, pp. 8 and 9.

The OCC also suggests that local franchise agreements be negotiated for full coverage (with a reasonable build-out period) for all areas of each municipality. Such a requirement would prevent cherry-picking by the incumbent LECs. In the opinion of the OCC, it is insufficient for SBC and Verizon to claim that competition will drive them to full coverage since history has shown that rollouts invariably track the ability to pay by one neighborhood over another. Relative to IP-video, public policy dictates that there not be "have and have-nots" chosen by the broadband providers based on their business plans, especially in light of efforts by these same providers to obtain state and federal legislation to prevent municipalities from installing their own networks. OCC Written Comments, pp. 11 and 12; OCC Reply Comments, pp. 5-7.

In addition, the OCC comments that express regulatory provisions requiring nondiscriminatory rollout of IP-video would be the most appropriate means to achieving

obvious public policy goals and any reliance on claimed competitive pressures or corporate morality would be misplaced. OCC Written Comments, p. 13.

Further, the OCC asserts that "must-carry" and retransmission consent requirements must apply to IP-video. According to the OCC, the paramount policy goal must be to make certain that an open architecture model remains available for all consumers, at reasonable prices, while encouraging innovation among the competitors. On the wholesale level, municipal and competitive networks could similarly experience difficulties connecting to Internet high-speed links in the absence of enforced common carrier requirement, which must also be prevented. The OCC states that consumers should have rights to access anything on the Internet, information or video, through whichever means or company provides them with access. OCC Written Comments, p. 23.

Moreover, the OCC contends that there is no evidence in the record to support a conclusion that the SBC and Verizon services are not cable service under federal law and a CATV service under Connecticut law. The OCC notes that SBC has indicated that it intends to provide video programming directly to customers, secured through contracts with broadcast and cable programming providers, thus requiring it to be certified as a CATV system under Connecticut law. Pursuant to state and federal laws, cable service or CATV service involves the one-way transmission to subscribers of video programming or other programming service. While SBC claims that its proposed services are "two-way" dialogues at the control of the subscriber and thus exempt its offering from state franchising requirements, the OCC contends that many cable operators have been offering similar services for quite some time and that a number of them are in the process of installing systems with services identical to that proposed by SBC. OCC Reply Comments, pp. 7 and 8.

The OCC also contends that laws and regulations controlling this field do not rely on an evaluation of the technology involved in delivery; but rather, the services as perceived by customers. Cable television or video conferencing are at the heart of the inquiry, not whether coaxial cable or Internet protocol over fiber is used to deliver the customer-requested services. The OCC maintains that the facilities used to deliver the video product lie within the definition of cable system under state and federal law, regardless of the transmission technology. Neither Title VI of the Communications Act nor FCC regulations provide that the transmission format of video content is a criteria for the classification of video programming. As such, the Department must regulate video offerings pursuant to the scheme Congress established in Title VI since there is no exemption for SBC or its proposed video offering under federal law and the Department lacks any authority to rule otherwise. OCC Reply Comments, pp. 8-10.

The OCC argues that Connecticut law ensures a healthy union between large national corporations and local communities. These ties encourage community relationships that in turn make the providers more responsive and generate more interest in their products. In the opinion of the OCC, it is obvious that cable operators will be placed in an untenable situation where they are required to provide capital and resources to support community access programming and interactions, while a potent competitor is not required to do so. OCC Reply Comments, pp. 10 and 11.

In addition, the OCC disagrees with the SBC claim that cable franchising and regulatory requirements will deter it from making the $4 billion infrastructure investment required for it to achieve its broadband goals. The OCC states that the current regulatory framework is designed to accommodate competing providers and is not a barrier to entry, and that the LECs have no choice but to make this investment. The OCC notes that while SBC claims that it cannot enter this market without exemption from regulations controlling the provision of video services, the cable operators have been operating under those conditions for decades and have built strong relationships with their communities, thereby strengthening their business position, as a result. OCC Reply Comments, pp. 11 and 12.

The OCC further claims that while the FCC may have the authority to regulate certain aspects of the IP-video controversy, only Congress may be able to preserve, regardless of a provider's technology, many of the obligations currently faced by cable TV providers through their franchises or under Title VI. The OCC offered a number of existing Title VI provisions that should also apply to the provision of IP-video on public policy grounds. Moreover, the OCC recommends that the Department petition the Congress to resolve the outstanding issues because it lacks the authority to handle all the issues involved in the instant proceeding. In the opinion of the OCC, the states are not in a position to offer responses that are fair to the market and to all the participants. OCC Written Comments, pp. 33-35.

Furthermore, the OCC maintains that discovery is required in this docket. According to the OCC, the Department cannot conclude on a summary basis without extensive further investigation that SBC's proposed video offering is not a cable service provided over a cable system that must be regulated subject to Title VI.

Lastly, the OCC argues that the LECs' proposed projects involve very complicated technology to develop and implement and suggests that it remains an open question as to whether they can economically install the needed infrastructure and capture market share sufficient to recoup their investment. To that end, the OCC suggests that in addition to basic franchising, the Department should examine SBC's technical trials to ensure that the company has developed the infrastructure and expertise necessary to accomplish the public policy goals inherent in the video franchise arena. The OCC also suggests that the Department develop a time line for implementation for the actual deployment of their respective technologies. OCC Reply Comments, pp. 12-15.

H. SBC

The Telco provided the following responses:

Question 1. Provide comment indicating whether the Verizon/SBC video product meets the definition of cable service as set forth in 47 U.S.C. Section 522(6). Provide comment indicating whether the Verizon/SBC video product meets the definition of community antenna television service (CATV) as set forth in Conn. Gen. Stat. § 16-1(a)(15).

The Telco contends that its IP-enabled video service does not meet the definition of cable service as set forth in 47 U.S.C. § 522(6), nor does it meet the definition of CATV service set forth in Conn. Gen. Stat. § 16-1(a)(15). The Telco is not building or deploying a "cable system" as that term is defined in Title VI. Similarly, its proposed video services do not meet the definition of "cable service" under Title VI.[14] Therefore, it will not be a "cable operator" under Title VI, and not subject to any requirements that apply solely to cable operators, cable systems, or cable services.[15]

According to the Telco, an essential feature of its IP-enabled video service is that it will be a highly interactive, two-way service.[16] Its video product will be a switched, "point-to-point" offering; only the channels selected by the customer will be delivered to the customer's set top box. The Telco states that this distinction has real meaning for the user and is determinative for purposes of the Department's inquiry. For example, it will permit subscribers to communicate in real time with the network and to provide them with the ability to tailor and manipulate much of the content they view. Subscribers will be placed at the command center of a sophisticated array of services and content that can be manipulated and individualized to meet the tastes and needs of each individual member of the subscriber's household.[17] In the opinion of the Telco, this interactivity

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14 NECTA argues that the federal and state standards for defining cable (or CATV) operators, services and systems, as well as video programming, are not based on the particular platform employed. NECTA also argues that the Telco has ignored the federal statutes that dictate the regulatory treatment of video services provided by common carriers. Lastly, NECTA notes that the Vonage Order has no application to video programming. NECTA Reply Comments, pp. 10-12.

15 Charter contends that the Telco has failed to offer a single decision from the FCC or any Department Decision upholding that position. Charter Reply Comments, p. 2.

16 NECTA asserts that the Telco's claim that its video service qualifies as a non-cable exclusively interactive on-demand service is dubious and cannot be accepted without demonstrable evidence. According to NECTA, the interactive capabilities which the Telco claims its video service will eventually have do not differentiate it from cable television services currently being offered or which have been offered over modern upgraded cable systems. NECTA also asserts that cable operators already provide most of the interactive capabilities publicized by the Telco. Additionally, NECTA notes that except for relatively limited content which is expressly authorized by cable programmers for use in video-on-demand applications, virtually all video programming shown over a cable network is prescheduled by the programmer. NECTA suggests that the Telco's claim that none of its video programming will be offered on a prescheduled basis must be looked at with extreme skepticism. NECTA states that both SBC officials and commentators have made clear that the Telco will need to offer programming that is similar to what is offered by cable in order to be competitive. Furthermore, broadcast programming shown over the Telco's cable system will have to comply with federal copyright requirements. NECTA contends that unless and until the Telco can offer demonstrable facts to support its ability to offer video programming without any prescheduled programming, the Department cannot conclude that the Telco falls within the exception to cable television classifications established in 47 U.S.C. § 522(7). Lastly, while acknowledging the Telco's claim that its video service will exclusively deliver programming that is individually selected by the subscriber, NECTA states that close review of the Telco's comments reveal that it only commits to "eventually" offer programming in this manner. NECTA claims that no authority in federal or state law permits an operator to avoid regulation of its network, services or operations today based on the nature of services it hopes to offer eventually at some unspecified future date. NECTA suggests that the Department focus on the present, and in particular the Telco's acknowledgments that its video offerings will be virtually identical to those offered by traditional cable companies. NECTA maintains that should the Telco's network change over time to a technical format that justifies complete or partial deregulation, it can seek relief if and when such circumstances actually transpire. NECTA Reply Comments, pp. 5-9.

17 Cablevision asserts that despite the Communications Act's reference to "one-way transmission" of programming, the mere presence of some two-way capability does not remove a service from the definition of "cable service." The full statutory definition expressly provides that a service is a cable

clearly was outside the bounds of what Congress considered "cable service" in the Cable Communications Policy Act of 1984 (1984 Cable Act) or in its subsequent amendments.

While commenting that Conn. Gen. Stat. § 16-1(a)(15) contains a definition of "community antenna television service" that closely tracks the federal definition, the Telco asserts that its discussion of 47 U.S.C. § 522(6) applies equally to Conn. Gen. Stat. § 16-1(a)(15), to the extent the provisions are consistent. However, to the extent Conn. Gen. Stat. § 16-1(a)(15) is found to be inconsistent with the federal requirements, that statute would be preempted. Telco Written Comments, pp. 2-4.

Question 2. In light of the Verizon July 11, 2005 and Telco July 14, 2005 responses, specifically indicate how the Verizon/SBC video product delivery system meets the definition of a cable system as set forth in 47 U.S.C. Section 522(7) and/or Conn. Gen. Stat. §16-1(a)(16).

The Telco's planned IP-enabled network does not meet the definition of a cable system as set forth in 47 U.S.C. § 522(7) nor does it meet the definition of a community antenna television system as set forth in Conn. Gen. Stat. § 16-1(a)(16). According to the Telco, the Cable Act specifically provides that a telephone company's facilities would not qualify as a cable system when used solely for "interactive on-demand services." The Telco claims that the Cable Act defines an interactive on-demand service as "a service providing video programming to subscribers over switched networks on an on-demand, point-to-point basis, but does not include services providing video programming prescheduled by the programming provider." SBC maintains that its IP-enabled network falls within this exclusion.[18]

For example, the IP-enabled network will be a switched, "point-to-point" offering designed to allow each subscriber the ability to interact directly with the network and select specific programming. This is in contrast to the point-to-multipoint "broadcast-like" transmissions employed by incumbent cable operators, which simultaneously sends all their channels to all subscribers' homes at once, while relying on a descrambling device in subscribers' set top boxes to allow them to view those channels they have selected.

The Telco's planned IP-enabled video service is also designed to be available on an "on-demand" basis. While the breadth and scope of on-demand capabilities will be a function of a number of factors, the Telco claims that the key is that SBC's massive investment will result in an infrastructure that will be able to meet the interactive on-demand exclusion found in the Cable Act.

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service even if it entails "subscriber interaction . . . which is required for the selection and use" of such programming. According to Cablevision, the Telco has not in any way indicated how the interactive component of its service removes it from this definition. Cablevision Reply Comments, pp. 4 and 5.

18 Cablevision notes that Connecticut law provides no such exemption. Cablevision also notes that even under federal law, the definition of "interactive on-demand services" specifically excludes services "providing video programming prescheduled by the programming provider." Cablevision Written Comments, p. 8, n.19; Cablevision Reply Comments, p. 7.

Additionally, the proposed next generation advanced broadband network will deliver an integrated suite of voice, video, Internet access and other services. According to the Telco, the FCC is actively considering the classification and appropriate regulatory framework for integrated IP-based service offerings, and it already has preempted state certification requirements for IP-enabled voice services as burdensome barriers to entry.[19] Application of cable franchise regulation to IP-enabled video services would impose the same type of barrier to entry (albeit orders of magnitude more burdensome) and would impede the deployment of IP broadband services to consumers.

The Telco states that these conclusions regarding the applicability of the "cable service" and "cable system" definitions under federal law do not mean that it will be free of regulation under Title VI. Certain of the content offered in connection with the IP-enabled video service will likely qualify as "video programming," (i.e., programming provided by, or generally considered comparable to programming provided by, a television broadcast station). Accordingly, the Telco will be a MVPD and subject to the regulatory scheme contained in Title VI that applies to MVPDs. Telco Written Comments, pp. 5 and 6.

Question 3. List all federal and state franchise requirements generally imposed on companies possessing cable Certificates of Public Convenience and Necessity (CPCNs) in Connecticut pursuant to Conn. Gen. Stat. § 16-331 et seq., including, but not limited to, build out requirements, public access and customer service requirements currently placed on CATV service providers offering cable television service in the state. In light of 47 U.S.C. Section 522(6) and Conn. Gen. Stat. § 16-1(a)(15), separately indicate which franchise requirements, if any, would apply to the Verizon/SBC video product.

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19 NECTA argues that the Telco has stated no legal support for its argument that its video services are entitled to treatment as an interstate service subject to exclusive federal regulation, because there is none. NECTA contends that the Vonage Order is limited to its facts regarding Voice over Internet Protocol services, similar to traditional Title II services, which differ in substance and regulatory treatment from the SBC video services. While claiming that the Telco has attempted to fashion a doctrine for video services based upon the FCC's unique analysis of the jurisdictionally mixed nature of voice services, NECTA maintains that such an analysis is inapplicable here. Moreover, the Vonage Order treats like services alike, applying to all VoIP services that share certain characteristics, whether offered by Internet voice providers. NECTA states that in contrast to the voice services at issue in the Vonage Order, federal and state law clearly specify the regulatory classification of video programming services transmitted by common carriers, unless OVS or MMDS services are at issue. Both federal and Connecticut statutes expressly require that video programming delivered by telephone companies shall be regulated as a cable service irrespective of the technology platform used to deliver the programming. In addition, NECTA argues that the Telco has requested the Department issue a ruling before the FCC, a reviewing court or Congress has determined whether the FCC or a State Commission would have jurisdiction to decide the proper classification of the Telco's video services as a matter of law and regulatory policy; before they have rendered such classification Decision; and before they have specified the applicable regulatory requirements. Consequently, NECTA concludes that the Department is barred from issuing a decision interpreting federal law to deregulate IP-based video services until such time as the FCC or Congress determine who is the proper party to decide the classification of the Telco's video services and the regulatory requirements that should govern such services. NECTA Reply Comments, pp. 13 and 14.

While providing a listing of the federal and state franchise requirements generally imposed on companies possessing cable CPCNs within Connecticut, the Telco claims that it will not be subject to those requirements because it will not be required to obtain a CPCN to offer its IP-enabled video services. With respect to Title VI, its IP-enabled video services will not be cable services and its proposed IP-enabled network will not be a cable system, nor will it be a cable operator in its provision of IP-enabled services over its network. Therefore, the Telco concludes that it will not be required to obtain a cable franchise to provide such services, and it will not be subject to any requirements that may apply to cable operators. It will, however, be an MVPD and subject to all of the requirements under Title VI currently applicable to MVPDs. Telco Written Comments, p. 7; Exhibit A.

Question 4. If the Verizon/SBC video product does not satisfy the definition of cable service as set forth in 47 U.S.C. Section 522(6) or CATV service as outlined in Conn. Gen. Stat. § 16-1(a)(15), should Verizon/SBC be required to obtain a CPCN before offering that product in Connecticut? Explain.

The Telco argues that it should not be required to obtain a CPCN before offering its service in Connecticut because its proposed IP-enabled video service does not satisfy the definition of cable service. In addition, the imposition of any additional CPCN requirements to its IP-enabled video services would not be in the public interest nor serve any purpose other than to blunt and discourage more broadband deployment in Connecticut. The Telco also argues that imposing additional entry barriers on telephone company video services would be inconsistent with the Cable Act. According to the Telco, Project Lightspeed will not only bring competition to the video services market; but, it is an effort to extend and enhance broadband capabilities in Connecticut by creating a platform to support a host of IP applications. Telco Written Comments, p. 8.

Question 5. If the Verizon/SBC video product does not satisfy the definition of cable service as set forth in 47 U.S.C. Section 522(6) or CATV service as outlined in Conn. Gen. Stat. § 16-1(a)(15), what regulatory requirements, if any, should be placed on Verizon/SBC relative to its video product offering?

As a provider of next-generation IP-enabled video services, the Telco recognizes certain public interest obligations. The Telco also believes that any provider of video services should account for public interests.[20] Telco Written Comments, p. 9.

Question 6. Some CATV operators have telephony affiliates (e.g., Cablevision Lightpath of CT, Inc.; Comcast Phone of Connecticut, Inc.; and Cox Connecticut Telcom, LLC) offering telephone service in Connecticut at a less restrictive level of state and federal regulation than that imposed on incumbent providers. If the Verizon/SBC video product does not satisfy the definitions outlined in 47 U.S.C.

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20 NECTA comments that the Telco has confirmed, that unless it is subjected to the same franchising process required of all Connecticut CATV operators, the Department and other affected parties will have no assurance whatsoever that the Telco will meet any of the social goals deemed important by Congress, the FCC, the General Assembly and the Department in connection with the provision of video programming to Connecticut subscribers. NECTA Reply Comments, pp. 15 and 16.

Section 522(6) and Conn. Gen. Stat. § 16-1(a)(15), discuss whether Verizon/SBC should be afforded the same less restrictive regulatory treatment. List all reporting requirements that Verizon/SBC should be subject to relative to its video service product.

The Telco states that in the video transmission marketplace, it is a new entrant using a new technology in a market that is dominated by CATV providers. According to the Telco, requiring IPTV providers to adhere to legacy cable regulation would establish an inappropriate regulatory asymmetry, where there is one set of less restrictive rules for cable companies as they use IP technology in their cable system to compete in the telephony market, and a more onerous set of rules for incumbent telephony carriers as they use IP technology in their existing systems to compete in the video market. Telco Written Comments, p. 10.

Question 7. Provide comment indicating whether the Verizon/SBC affiliate that would offer the video product meets the definition of multichannel video programming distributor as outlined in 47 U.S.C. Section 522(13).

The Telco adopts its response to Question 1 as its response to this question. Telco Written Comments, p. 11.

Question 8. Compare and contrast the Verizon/SBC video product to that offered by direct broadcast satellite (DBS) service providers. Describe the level of federal and state regulation and requirements currently imposed on DBS providers. Should Verizon/SBC be afforded the same level of regulatory treatment as that imposed on DBS service providers? Explain.

The Telco's IP-enabled video services will include some content similar to that provided by DBS operators. In particular, it will include video programming such that the Telco will be an MVPD. Accordingly, the requirements in Title VI applicable to MVPDs will apply to the Telco to the extent that it is offering video programming. DBS providers also are subject to specific requirements in Title III (e.g., 47 U.S.C. §§ 335, 339). Those provisions, however, apply only to DBS providers, and would not apply to the Telco's IP-enabled video services. Telco Written Comments, p. 12.

Question 9. In light of the Verizon July 11, 2005 and Telco July 14, 2005 responses, separately list all FCC orders, rulings, etc. supporting the position that the Department is preempted from regulating the Verizon/SBC video product. Separately discuss the effect, if any, the recent Supreme Court Decision in National Cable & Telecommunications Association et al v. Brand X Internet Services et al and Federal Communications Commission and United States v. Brand X Internet Services et al (*Brand X*) would have on the Department's regulation of the Verizon/SBC video product. Compare and contrast this level of Department regulation with that currently imposed by the Department on other Internet service-related/broadband products (e.g., Internet dial-up access, Cable Modem Service, Digital Subscriber Line Service, regulation of Internet Service Providers, etc.).

Pursuant to the Cable Act, state law must yield to federal law in governing the regulation of “cable services.” Congress provided that no franchising authority may regulate the services, facilities, and equipment provided by a cable operator except to the extent consistent with 47 U.S.C. § 544(a). With respect to the local franchising requirements in the Cable Act, the First Circuit recently held that Congress has made it clear that the Cable Act will preempt any inconsistent state or local law. In this way, the Cable Act conforms to the principle that a federal law preempts any state law that conflicts with or frustrates the purpose of the federal law.

The Telco asserts that the Supreme Court has held, Section 602(7) of the Communications Act, as amended, determines the reach of franchise requirements by defining the operative term "cable system." While noting that the “community antenna television system” and “community antenna television service” definitions in the Connecticut statutes are similar to those in Title VI, the Telco maintains that any differences that are construed to impose cable franchising requirements on IP-enabled video services that would not otherwise be subject to franchising requirements under the Cable Act, then that application of the Connecticut statutes would directly conflict with and thus be preempted by the Cable Act.

The Telco also asserts that the imposition of a national framework which prevents states and localities from extending cable franchise regulation to IP-enabled video services and networks not expressly identified in the Cable Act is critical to effectuate Congressional purposes and objectives. Allowing different franchising authorities to apply franchising requirements to IP-enabled video companies, networks, and services would frustrate the national broadband and advanced services deployment policy goals established by Congress in the 1996 Telcom Act. In the opinion of the Telco, such franchising regulation by numerous franchising authorities will impede the national interest in deployment of broadband facilities than the regulation of VoIP by 50 state commissions. Promotion of advanced infrastructure and services is a policy committed to the FCC’s care, and preemption of local franchising requirements contrary to the requirements set forth in the Cable Act is necessary to ensure fulfillment of that goal. Accordingly, the Telco concludes that any attempt to apply Connecticut’s cable franchise laws and regulation to IP-enabled video services would be preempted.[21] Telco Written Comments, pp. 13-15.

Question 10. If the Verizon/SBC video product does not invoke the Department’s jurisdiction over that offering, should an informational filing be made with the Department describing the prospective service? Explain. If yes, provide the information that should be included in the filing (e.g., geographic area to be served, services offered, rates, customer service plan, etc.).

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21 Cablevision does not believe that the Department is preempted from regulating the Telco’s video product because that product is a “community antenna television service” under Connecticut law. Cablevision also suggests that the Brand X case has no effect on the Department’s ability to regulate the SBC video product. In the opinion of Cablevision, Brand X concerned solely whether cable modem service should be classified as wholly an information service or as including a telecommunications service. It did not purport to address Title VI services such as that at issue in this proceeding. Cablevision Reply Comments, p. 12.

The Telco does not believe there is any requirement to make any informational filings with the Department describing its prospective service. However, the Telco indicated its willingness to keep the Department informed of its products and services as they become available to consumers. Telco Written Comments, p. 16.

I. VERIZON

Through its FTTP initiative, Verizon intends to improve its existing telecommunications network to provide high-speed telecommunications and information services to customers in Connecticut. Verizon claims that its broadband network will enhance voice and data applications and have the potential to deploy video services. Before providing video services in Connecticut however, Verizon intends to file an application with the Department for a CPCN to operate a cable television system.

Verizon expects that its proposed video product, once deployed, will meet the definition of cable service set forth in Conn. Gen. Stat. § 16-1(a)(15) and it will be subject to applicable requirements for video providers set forth in the Connecticut General Statutes and Department regulations. Verizon states that nearly all of the questions posed in the Notice presuppose that Verizon intends to act as a cable service provider in Connecticut without seeking approval to do so from the Department. Verizon asserts that this is not the case and there is no reason to continue this proceeding with respect to Verizon. Therefore, Verizon requests that it be dismissed from this Docket. Verizon Written Comments, pp. 1 and 2.

V. DEPARTMENT ANALYSIS

A. LEGAL DEFINITIONS

To determine the appropriate regulatory construct applicable to the types of video services Verizon and SBC plan to provide in Connecticut, the Department turns to definitions codified in Federal and State law. In this proceeding, the Department must make several key distinctions among various types of services. Essentially, there are three such historic constructs that may apply under Federal law. Those three constructs are generally referred to as Title I regulation (which applies to data and information services such as Internet access), Title II regulation (traditional telecommunications service such as voice services), and Title VI regulation (traditional cable television services). To facilitate this analysis, the Department provides the following definitions applicable to cable television services.

1. Federal Law

The Cable Communications Policy Act of 1984 § 602 (47 CFR § 522) offers the following definitions:

(1) the term "activated channels" means those channels engineered at the headend of a cable system for the provision of services generally available to residential subscribers of the cable system, regardless of whether such services actually are provided, including any channel designated for public, educational, or governmental use;

(2) the term "affiliate", when used in relation to any person, means another person who owns or controls, is owned or controlled by, or is under common ownership or control with, such person;
(3) the term "basic cable service" means any service tier which includes the retransmission of local television broadcast signals;
(4) the term "cable channel" or "channel" means a portion of the electromagnetic frequency spectrum which is used in a cable system and which is capable of delivering a television channel (as television channel is defined by the Commission by regulation);
(5) the term "cable operator" means any person or group of persons--
(A) who provides cable service over a cable system and directly or through one or more affiliates owns a significant interest in such cable system, or
(B) who otherwise controls or is responsible for, through any arrangement, the management and operation of such a cable system;
(6) the term "cable service" means--
(A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming service, and
(B) subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service;
(7) the term "cable system" means a facility, consisting of a set of closed transmission paths and associated signal generation, reception, and control equipment that is designed to provide cable service which includes video programming and which is provided to multiple subscribers within a community, but such term does not include--
(A) a facility that serves only to retransmit the television signals of one or more television broadcast stations;
(B) a facility that serves subscribers without using any public right-of-way;
(C) a facility of common carrier which is subject, in whole or in part, to the provisions of subchapter II of this chapter, except that such facility shall be considered a cable system (other than for purposes of §621(c) of this title) to the extent such facility is used in the transmission of video programming directly to subscribers; unless the extent of such use is solely to provide interactive on-demand services;
(D) an open video system that complies with section 653 of this title; or
(E) any facilities of any electric utility used solely for operating its electric utility system;
(8) the term "Federal agency" means any agency of the United States, including the Commission;
(9) the term "franchise" means an initial authorization, or renewal thereof (including a renewal of an authorization which has been granted subject to §626 of this title), issued by a franchising authority, whether such authorization is designated as a franchise, permit, license, resolution, contract, certificate, agreement, or otherwise, which authorizes the construction or operation of a cable system;
(10) the term "franchising authority" means any governmental entity empowered by Federal, State, or local law to grant a franchise;
(11) the term "grade B contour" means the field strength of a television broadcast station computed in accordance with regulations promulgated by the Commission;
(12) the term "interactive on-demand services" means a service providing video programming to subscribers over switched networks on an on-demand, point-to-point basis, but does not include services providing video programming prescheduled by the programming provider;
(13) the term "multichannel video programming distributor" means a person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct

broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming;
(14) the term "other programming service" means information that a cable operator makes available to all subscribers generally;
(15) the term "person" means an individual, partnership, association, joint stock company, trust, corporation, or governmental entity;
(16) the term "public, educational, or governmental access facilities" means--
(A) channel capacity designated for public, educational, or governmental use; and
(B) facilities and equipment for the use of such channel capacity;
(17) the term "service tier" means a category of cable service or other services provided by a cable operator and for which a separate rate is charged by the cable operator;
(18) the term "State" means any State, or political subdivision, or agency thereof;
(19) the term "usable activated channels" means activated channels of a cable system, except those channels whose use for the distribution of broadcast signals would conflict with technical and safety regulations as determined by the Commission; and
(20) the term "video programming" means programming provided by, or generally considered comparable to programming provided by, a television broadcast station.

2. State Law

Connecticut law (Conn. Gen. Stat. § 16-1(a)(14-18)) in many respects mirrors federal law, and offers the following definitions:

(14) "Community antenna television company" includes every person owning, leasing, maintaining, operating, managing or controlling a community antenna television system, in, under or over any public street or highway, for the purpose of providing community antenna television service for hire and shall include any municipality which owns or operates one or more plants for the manufacture or distribution of electricity pursuant to section 7-213 or any special act and seeks to obtain or obtains a certificate of public convenience and necessity to construct or operate a community antenna television system pursuant to section 16-331;
(15) "Community antenna television service" means (A) the one-way transmission to subscribers of video programming or information that a community antenna television company makes available to all subscribers generally, and subscriber interaction, if any, which is required for the selection of such video programming or information, and (B) noncable communications service;
(16) "Community antenna television system" means a facility, consisting of a set of closed transmission paths and associated signal generation, reception and control equipment that is designed to provide community antenna television service which includes video programming and which is provided in, under or over any public street or highway, for hire, to multiple subscribers within a franchise, but such term does not include (A) a facility that serves only to retransmit the television signals of one or more television broadcast stations; (B) a facility that serves only subscribers in one or more multiple unit dwellings under common ownership, control or management, unless such facility is located in, under or over a public street or highway; (C) a facility of a common carrier which is subject, in whole or in part, to the provisions of Subchapter II of Chapter 5 of the Communications Act of 1934, 47 USC 201 et seq., as amended, except that such facility shall be considered a community antenna television system and the carrier

shall be considered a public service company to the extent such facility is used in the transmission of video programming directly to subscribers; or (D) a facility of an electric company which is used solely for operating its electric company systems;
(17) "Video programming" means programming provided by, or generally considered comparable to programming provided by, a television broadcast station;
(18) "Noncable communications service" means any telecommunications service, as defined in section 16-247a, and which is not included in the definition of "cable service" in the Communications Act of 1934, 47 USC 522, as amended. Nothing in this definition shall be construed to affect service which is both authorized and preempted pursuant to federal law.

B. VERIZON

Verizon indicates that once its video product is deployed, that offering will meet the definition of cable service as defined by Conn. Gen. Stat. § 16-1(a)(15). Consequently, Verizon would be subject to the applicable requirements for video providers imposed in the Connecticut General Statutes and Department regulations. Accordingly, Verizon requested that it be dismissed from the instant proceeding. Verizon Written Comments, pp. 1 and 2.

By letter dated September 16, 2005, the Department granted Verizon's request to be dismissed from this proceeding. Nevertheless, the Department notes that Verizon will be providing high-speed telecommunications and information services, in addition to a video offering over the same broadband network. Verizon July 14, 2005 Video Product Description, p. 1. Verizon has the legal right to use the right of way to upgrade and maintain its existing telecommunications network. As such, Verizon may perform such network upgrades to facilitate its offering of its high speed telecommunications and information services. Verizon should not install any plant in its network that would be used exclusively for its video product until such time as it has been awarded a CATV CPCN by the Department.

C. SBC

Participants in this proceeding divided on the issue of whether SBC's IPTV service meets federal and state definitions of "cable service," particularly with regard to the "...one-way transmission to subscribers of video programming." SBC insists its service is fundamentally interactive and two-way; NECTA and other participants maintain that the Telco's IP-video product is sufficiently similar to a conventional CATV in terms of its underlying characteristics, technology, and delivered product, to warrant similar regulatory treatment as a cable operator providing cable services.

Before attempting to legally define IPTV, the following is offered as an analysis comparing and contrasting system architectures and platforms, along with the components inherent in IPTV and CATV networks.

SBC announced a $4 billion capital project initiative, entitled Project Lightspeed, that it claims will enhance the broadband capabilities of its existing telecommunications

network. Telco July 14, 2005 Video Product Description, p. 1.[22] In Connecticut, this initiative is intended to enhance the Telco's existing DSL network by increasing bandwidth and connection speeds from 6 Mbps up to a 20-25 Mbps line rate. Whitehead Testimony, p. 4; Boyer Testimony, p. 10. This upgrade will support and integrate a wide array of voice, data, video and other applications. Telco July 14, 2005 Video Product Description, p. 1. Through its Project Lightspeed initiative, the Telco intends to offer a suite of IP-enabled services including high speed Internet access, VoIP, and IP-video service. Boyer Testimony, p. 11.

Project Lightspeed will involve both FTTN and FTTP technologies that will permit the Telco to provide IP-enabled services because the deployment of those technologies will increase bandwidth available to subscribers. Boyer Testimony, p. 11. FTTN architecture typically comprises fiber-optic plant to a neighborhood node, from which point twisted copper pairs are extended to each premises served.[23] IP is a form of packet switching that permits the two-way Internet transmission of data from one computer to another. Id., p. 12. "Packet switching" refers to the protocol in which

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22 In undertaking this investigation, the Department is also guided by § 706 of the Telcom Act. Section 706 requires that the Department encourage "the deployment on a reasonable and timely basis of advanced telecommunications capability . . . measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment. Indeed, the FCC has determined that one of the goals of the Telcom Act is to stimulate competition for all telecommunications services, including advanced services to innovate and deploy new technologies more rapidly, ultimately resulting in increased choices for consumers of advanced services and in more widespread availability of services, all at reasonable rates. CC Docket No. 99-204, In the Matter of Federal-State Joint Conference On Advanced Telecommunications Services (706 Order), released October 8, 1999.

In addition, Conn. Gen. Stat. § 16-247a(a) states that due to the following: Affordable, high quality telecommunications services that meet the needs of individuals and businesses in the state are necessary and vital to the welfare and development of our society; the efficient provision of modern telecommunications services by multiple providers will promote economic development in the state; expanded employment opportunities for residents of the state in the provision of telecommunications services benefit the society and economy of the state; and advanced telecommunications services enhance the delivery of services by public and not-for-profit institutions, it is, therefore, the goal of the state to (1) ensure the universal availability and accessibility of high quality, affordable telecommunications services to all residents and businesses in the state, (2) promote the development of effective competition as a means of providing customers with the widest possible choice of services, (3) utilize forms of regulation commensurate with the level of competition in the relevant telecommunications service market, (4) facilitate the efficient development and deployment of an advanced telecommunications infrastructure, including open networks with maximum interoperability and interconnectivity, (5) encourage shared use of existing facilities and cooperative development of new facilities where legally possible, and technically and economically feasible, and (6) ensure that providers of telecommunications services in the state provide high quality customer service and high quality technical service.

Because Project Lightspeed will entail the offering of voice, data and video services, it is incumbent upon the Department to investigate the potential of new service offerings to ensure that the Connecticut public is afforded access to new and advanced telecommunications services. The Department has embraced these obligations by placing the public interest at the forefront by ensuring the deployment of the most advanced technologies while affording the various service providers the opportunity to compete with incumbent providers on a fair and level playing field. In keeping with the spirit of federal and state acts and rulings, the Department has attempted to meet these same obligations through its investigation in this proceeding of advanced services, including the offering of video products by Verizon-NY and the Telco.

23 FTTP typically extends fiber up to the customer premises and is generally deployed in Greenfield areas of development. De Veciana PFT, p. 8.

messages are divided into packets before they are delivered. Each packet is then transmitted individually and in some cases, may follow different routes to its destination. Once all the packets forming a message arrive at the destination, they are reassembled into the original message. The Telco currently uses packet switching in its telecommunications network in the provision of broadband DSL and other switched services. Project Lightspeed will operate in a similar manner permitting the Telco to transport voice, data and video IP packets over fiber and copper facilities to and from end users. The Telco refers to these services as IP-enabled services. Id., pp. 12 and 13.

The Internet employs an open network architecture to transmit data in a manner fundamentally different from the way in which signals transit a circuit-switched service (such as a typical local or long distance telephone call). FCC Notice of Proposed Rulemaking, WC Docket No. 04-36, In the Matter of IP-Enabled Services (IP-NPRM), Released March 10, 2004, ¶8. In an IP network, bits of data are segmented into packets that are individually addressed and then transmitted over a series of physical networks which may be comprised of copper, fiber, coaxial cable or wireless facilities. Network routers examine the address of each passing IP packet, and determine to which other router in the network the IP packet should be sent. Because each network constantly communicates to and fro with other routers, each router is "aware" of whether other routers are active, and if so, the amount of traffic being carried. When the packets reach their final destination over the IP network, they are "unwrapped" and the data inside is used for an application. Id., n. 25. That data may be voice information (e.g., a VoIP "phone" call), video (e.g., a short video clip of a family reunion sent via e-mail), data (e.g., a fax, NASDAQ information, a purchase transaction), or a combination thereof encoded (and sometimes encrypted) into bits, packetized, transmitted, received, de-packetized, de-encrypted, and de-encoded.

When the packets are transmitted via IP between two points, the network does not establish a permanent or exclusive path between the two points. Instead, routers read packet addresses individually, and decide, sometimes on a packet-by-packet basis, which route to use for each packet. Thus, the routes that the packets will take to the same destination may vary, depending on the best routing information available to the routers. Id., ¶8.

The Telco's IP-enabled video service, or IPTV, will utilize IP technology on a point-to-point basis, including transmission to the subscriber's premises, offering a host of features that are not available over the existing network. Telco Reply Comments, n.15, p. 18. Project Lightspeed will also involve the installation of equipment, driven and operated by software in the Telco's facilities and at the customer premises. Examples of the equipment that will be used for the Telco IP-based products, including its video offering, are servers, routers and encoders that are typically found in an Internet network to serve up web pages and other information to personal computers. Whitehead Testimony, p. 22. A Network Address Translator (NAT), located at each home, accepts the IP data transmissions, disaggregates those transmissions and routes them to the various devices within each customer's premises. Id.

The term "CATV" is an abbreviation of community antenna television. Years ago, many communities experienced poor off-air television reception due to signal distance

or signal interference caused by geographic impediments. Early cable operators developed networks that initially served as a "community antenna," and evolved into networks that collected broadcast TV programs and distributed them over coaxial cable. These networks employ a tree and branch topology in which all households within a franchise area share programming signals transmitted concurrently on shared coaxial cable trees. De Veciana Testimony, p. 10. As the industry matured, frequency allocation solutions were developed to distribute more and more video signals within the network. CATV networks were designed based on analog broadcast TV standards such that each radio frequency signal was confined within a 6 MHz bandwidth channel. Most CATV systems now operate at 750 MHz bandwidth capable of delivering 75 analog channels, while reserving some bandwidth for other applications.

In contrast to the Telco's IP-enabled video product, a typical cable system (akin to the video delivery system proposed to be deployed by Verizon) uses a one-to-many network design to deliver many program streams simultaneously to many subscribers over coaxial cable. Krauss Powerpoint Presentation (KPP), p. 5; Tr. 12/15/05, p. 360. In general, coaxial cable has a much higher communications capacity over longer distances than a twisted copper pair. The Telco's delivery of its voice, data and video signals will use a dedicated point-to-point twisted copper pair to reach each customer's home. De Veciana Testimony, p. 9. However, unlike the traditional cable system, the Telco's IP-based network is more limited in capacity. Consequently, the Telco will require switching to deliver a competitive number of programs to subscribers. KPP, p. 3.

In addition, the delivery of the Telco's video signal will differ from that provided by a typical CATV system since programming is transmitted concurrently on shared coaxial cable trees in the CATV network. De Veciana Testimony, p. 10. Since the advent of fiber optic technology, many cable TV operators have deployed Hybrid Fiber Coaxial (HFC): a network of fiber optic cable and coaxial cables. HFC served to improve signal and picture quality, and also reduced the need for signal amplification devices to boost the CATV signal to distant points in the network. In modern CATV networks, fiber is deployed to the node serving a neighborhood, from which point coaxial cables are extended via feeder and distribution plant to the home. Because of coaxial cable's greater communications capacity over distance in comparison to twisted copper pairs, CATV networks have a much higher corresponding bandwidth capacity than copper-based telecommunications networks.

Programming transmission by CATV operators is achieved through frequency division to carry traditional analog video signals, each of which is broadcast on a different frequency band. De Veciana Testimony, pp. 4 and 10. Cable system operators also use frequency division multiplexing to separate 6 MHz channels from one another, and use statistical multiplexing to carry multiple video programs within each 6 MHz channel slot. KPP, p. 10. The Telco, while distributing its video programming through IP packet transmission, will employ statistical multiplexing only. The basic concept underlying statistical multiplexing is the queuing of packets associated with different users and traffic types (i.e., voice, data or video) and scheduling them for transmission over the optical fiber or copper wire. Inherent in the network is a priority scheduling that protects packet streams (in this case, video) from undue delays or queue overflows. Each IP packet destined to a user will be routed by

packet switching routers within the network. De Veciana Testimony, Attachment, Comparing Traditional Cable TV and SBC IP-Based Video Delivery Networks (Report), p. 5.

Another difference between traditional cable systems and that proposed by the Telco relates to the video signal itself. In particular, cable systems are considered bandwidth rich and offer analog and digital video signals. An analog video channel typically occupies 6-MHz while multiple digital programming services carried over a CATV network can be compressed into a single 6-MHz space. KPP, p. 7; Tr. 12/15/05, pp. 362-365. In contrast, the Telco's network is altogether incapable of carrying analog video; it offers digital video signals only. Additionally, CATV programming and CATV networks currently use the MPEG2 compression standard while the Telco will employ the next generation MPEG4 standard.[24] KPP, pp. 8 and 9; Report, p. 4. In general, digital video holds an advantage over analog video because it can be easily compressed, reducing the amount of resource required to transport it while delivering equivalent or better quality. Report, p. 4. As a result, network bandwidth will be more efficiently utilized by the Telco than in contemporary CATV networks.

With this overview, the Department now turns to one of the key contested issues in this proceeding: whether IPTV service constitutes a "...one-way transmission to subscribers of video programming," which would fall under the legal definition of "cable service."

The Telco insists IPTV service is fundamentally interactive and two-way, while NECTA and other participants maintain that IP-video is sufficiently similar to conventional CATV in terms of its underlying characteristics, technology, and delivered product, to warrant similar regulatory treatment. NECTA argues that modern CATV systems are also two-way in some respects (e.g., VOD) and differ only slightly from the Telco's purported two-way capabilities. NECTA also argues that because SBC's IPTV programming only travels "downstream" (that is, from SBC to the subscriber's home), IPTV is not truly "two-way." NECTA notes that IPTV "upstream" traffic comprises only program selection commands and network management messages which would continue to satisfy the definition of a "cable service" over a "cable system" as "subscriber interaction required for the selection or use of video programming." NECTA Comments pp. 31-33; NECTA Brief, pp. 10 and 11.

The Telco argues that its network relies on constant communication and interaction with individual customers in the delivery of video services. Telco Reply Comments, p. 12. For a video packet stream associated with a specific program (such as an episode of a TV network series) to reach an IPTV subscriber's home, the subscriber must interact with Telco network servers and routers through a set top box to ensure that the appropriate bytes - in this instance a packetized video stream - and only that video stream - reaches the customer premises from a remote point in the network. Id., pp. 5 and 6. As indicated above, the delivery of the IPTV programming differs from that provided by CATV operators. In particular, with IPTV programming, only the video data stream requested by the subscriber is transmitted between the Telco's servers and

24 According to NECTA, the MPEG4 standard is better than MPEG2. Late-Filed Exhibit 14, Migrating to Advanced Video Coding – What's the Plan?, CED Magazine, p. 1.

customers as opposed to the programming "broadcast" over the entire CATV network by the system operators. While acknowledging that many incumbent cable operators offer limited two-way features such as VOD ancillary to their primary one-way transmission of linear video programming, the Telco notes that two-way transmission interaction is required for each and all of its video programs such that all content offered is fundamentally "on demand" and two-way in nature. SBC Brief, pp. 6-9, 14-18. The individualized and constant downstream *and upstream* error correction, and network management data traveling back and forth (which activity is transparent to the subscriber) in the IPTV connection between SBC and its subscriber is vital to successful IPTV delivery - without the "upstream" piece, the service would not function.[25] On the other hand, most CATV programming is delivered in a truly one-way path to a multitude of subscribers with little or no two-way or upstream communication.

The FCC has considered the phrase "one-way transmission to subscribers" to reflect the traditional view of cable primarily as a medium of mass communication, with the same package or packages of video programming transmitted from the cable operator and available to all subscribers. FCC Declaratory Ruling and Notice of Proposed Rulemaking In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities GN Docket No. 00-185, Internet Over Cable Declaratory Ruling, Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, CS Docket No. 02-52 (Cable Modem Ruling), ¶61. The FCC, while noting the Congress' intent that the cable service definition marks the boundary between those services provided over a cable system which would be exempted from common carrier regulation under section 621(c) and all communication services that could be provided over a cable system, determined that the one-way delivery of television programs, movies and sporting events is not a traditional common carrier activity and should not be regulated as such. Id.

It is clear to the Department that delivery of the Telco's video product will require regular upstream and downstream communication between the video subscriber and IP-video server, thus requiring a two-way capability not necessarily required by CATV operators for the conventional distribution of cable video programming. It is this two-way interactivity that most clearly distinguishes IP-enabled video from traditional cable service. Indeed, the Department finds no difference between the manner in which a voice, data or video packet stream is interacted with and delivered to the customer in this scenario.

The Department also believes that the Telco's proposed IP-video product resembles the attributes of an Information Service as defined by the Telcom Act. An Information Service is defined as "the offering of a capability for generating, acquiring, storing, transferring, processing, retrieving, utilizing or making available information via telecommunications . . ."[26] The Department finds instructive an analysis conducted by

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25 Upstream error correction and information authentication allow the Telco's distribution server (DServer) to monitor the data exchanged between the end user and the Telco. Tr. 12/7/05, p. 189. In the event of an apparent loss or damage to data, the network reads the upstream report of corruption and corrects the situation by sending a "unicast" or point-to-point burst of corrected IP packets to the customer. Such retransmissions of signal errors are not currently available in typical CATV networks. Report, pp. 6 and 7.

26 47 U.S.C. §153(20).

the FCC when it evaluated and concluded that pulver.com's Free World Dial-Up Service (FWD) was an Information Service.[27]

The Department finds that unlike the provision of typical CATV services, the Telco will be offering its video service through telecommunications. In particular, the Telco will be making available through a server, its video product together with its voice and data services. Thus, subscribers to the Telco's video service will be acquiring content (i.e., video programming) from the Telco's server. Boyer Testimony, p. 17. Subscribers will also have the ability to select and view more than one video data stream at the same time. This application commonly known as picture-in-picture (PIP) viewing, will deliver to subscribers numerous data streams transmitted from the Telco's server and offer requesting consumers multiple video signals on a concurrent basis. This application differs from that typically offered by cable operators in that CATV consumers can access programming only by tuning to a different frequency channel. That is, CATV consumers' television sets must have the PIP capability whereby the sets contain two tuners as opposed to the sole tuner necessary for the Telco IPTV subscriber to avail himself of the PIP capabilities.

In addition, the Telco's IP-video service will depend on constant communication between its servers and consumers and processing information and interacting through their set top box to ensure that they are authorized to receive the programming. As part of the video signal verification, Telco servers acknowledge receipt of upstream requests and send IP authorization keys back to the consumers' set-top boxes. The set-top boxes then utilize those keys for security purposes so that only a set-top box with the stored correct authorization keys can decrypt and retrieve the secure IP-video stream stored at the server. Once that verification is made, it makes available the video data stream. Finally, in the event that a video stream is "damaged" during transmission, its video product transforms or provides for error correction so that the consumer receives the programming they have requested. Whitehead Testimony, pp. 17 and 18.

The Department is of the opinion that the differences between FWD and the Telco's video product are all but indistinguishable. Both services use telecommunications to transmit the IP packets between the server and consumer's premises. The attributes of the Information Service definition are also satisfied by each IP-based service. In the opinion of the Department, the only difference between these services occurs after the IP packets are terminated at the NAT when they are reassembled into a voice communication or video offering.

Furthermore, the Telco video customer interaction will differ from that of a cable system because in the traditional CATV network, all broadcast programming is transmitted on a shared medium reaching all subscribers in a given neighborhood. It appears counterintuitive to the Department that IPTV subscribers would have to originate specific programming (such as the TV network series episode example used above) and send it "upstream" to SBC for IPTV service to be considered other than "one-way transmission to subscribers of video programming." IPTV service, as

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27 FCC Memorandum and Order, WC Docket No. 03-45, In the Matter of Petition for Declaratory Ruling that pulver.com's Free World Dial-Up is Neither Telecommunications Nor a Telecommunications Service, released February 19, 2004. In particular, see ¶¶ 11 and 12.

proposed by SBC, is fundamentally two-way in nature, and as such, does not meet the federal or state definition of "cable service" despite the apparent similarity in images that may appear on end-users' screens in IPTV and CATV households.

From a definitional perspective, NECTA also maintains that, because the Telco admits common carrier facilities will be used to deliver “video programming” to “subscribers,” the Telco's facilities will qualify as a “cable system” under 47 U.S.C. § 522(7)(C) (regulating common carrier facilities as cable systems) and 47 U.S.C. § 522(20) (definition of “video programming” subject to federal cable television regulation). NECTA posits that Title VI regulation is technology-neutral and any video programming service is cable service. NECTA Brief, pp. 1, 6-8, 20.

The Telco counters that although its IP-enabled video service is not a cable service, it will be a MVPD as defined under Title VI because it will “. . . make[s] available for purchase, by subscribers or customers, multiple channels of video programming.” 47 U.S.C. § 522(13). It follows, according to the Telco, that it will be subject to the regulatory scheme contained in Title VI that applies to MVPDs, which is comparable to but not identical to the level of regulation currently applicable to DBS providers. SBC Brief, pp. 1 and 5.

In the case of the IP network however, the subscriber cannot receive all channels available, so the set top box must select a specific IP address from which the data stream will circulate. Moreover, the packet stream will be carried over multicast IP because it will allow the stream to be distributed to all subscribers that want to have access to it without duplicating it on the common paths between the server and the customer. Late-Filed Exhibit 13, *IPTV: The Need for Standards*; Communications Technology, November 2005, p. 4. In the case of the IP-video product, customers will request a unique data packet stream consisting of an individual video program, that will be transmitted to that subscriber’s unique IP address. It follows that because the Telco’s IP-video service is not a “cable service” pursuant to 47 U.S.C. § 522(6), the Telco is also not a cable operator pursuant to 47 U.S.C. § 522(5). Invocation of traditional cable franchising requirements is not triggered by the provision of IPTV service as planned by the Telco.

The Department is also of the opinion that the Telco video customer interaction is nearly identical to that which is normally associated with typical telecommunications carrier activities (e.g., the transmission of voice and data). While modern CATV systems may offer limited two-way video capabilities (e.g., VOD), the Department believes that these capabilities are limited when compared to the Telco's IPTV network. That is, in the IP-based network, two-way capability and interaction is ever-present, always requiring a dynamic interaction between the customer and network.[28] In the

28 However, when a Telco IPTV customer's set is turned off, that customer ceases to receive any video program into his home. This is distinct from cable television service in which a slate of programming is continuously provided to many subscribers regardless of whether each set top box in each home is "off." Only when the IPTV subscriber interacts with the system by requesting a channel/program will the individual video program be sent to that end user's premises. The traditional cable subscriber merely tunes in a new frequency from video programming array continually transmitted to the premises as there is no upstream, two-way signaling involved with most traditional CATV programming.

instant case, this two-way interaction is between each customer's set top box and Telco servers. The Telco's network continues tracking customer video streams to ensure that the proper video packets are received by the appropriate customers unlike traditional CATV systems. De Veciana Testimony, pp. 11-13. If the Telco were to use this network solely for the provision of voice and data services, it would not be considered a cable system; rather, it would be considered a high speed broadband network. Inclusion of a video packet stream in addition to voice and data does not in the opinion of the Department, transform the network into a cable system.

The Department also notes that in defining what constitutes a cable service, the FCC also acknowledged the legislative history of the Cable Act and Congress' intent. The Department finds these references telling because they clearly demonstrate Congress' intent as to what cable service is and what it is not. In particular, Congress' assertion that the offering of a "capacity to engage in transactions or *off-premises data processing*, including unlimited keyword searches or the *capacity to communicate instructions or commands to software programs stored in facilities off the subscribers premises*" was not a cable service. Cable Modem Ruling, ¶64 (emphasis added).

In the opinion of the Department, these references clearly summarize the Telco's video product, and so doing, place it squarely outside the definition of cable service. The above statements describe all IP-based offerings (i.e., voice, data and video) that will be packetized and transmitted by the Telco. Specifically, subscribers must communicate their upstream instructions for a packet stream, whether they be for voice, data or video (or some combination thereof), to facilities off of their premises (i.e., to the Telco's server). These instructions are customer-specific, fulfilling a specific data request – in some instances, video programming.

The Telco has presented the Department its proposal relative to constructing an advanced telecommunications network in Connecticut. Through its Project Lightspeed upgrade, the Telco will offer consumers an integrated suite of voice, video, Internet access and other services. Because all services provided over that network will be IP-based, subscribers will have the ability to tailor and integrate their voice, data and video content. Additionally, the Project Lightspeed network will consist of a two-way point-to-point communications architecture, making available an enhanced capacity to carry IP packet traffic including a switched video offering. The Telco's IP-based video product will be of a digital nature transmitted in a stream of IP packets. Consequently, the Telco's video product is not a cable television service because it is simply another IP data stream transmitted over the Internet. Therefore, the Telco's IP-video product should not be subject to legacy cable franchising requirements.

As a result of the Telco's IP-based video offering, consumers will be provided with increased choice, better picture quality and perhaps access to greater programming than that currently provided by the incumbent providers. The Department also expects that with the entry of an additional video programming provider, prices for CATV service will decrease or that any rate increase will be lessened because of the Telco market presence.

D. PUBLIC POLICY

The AG, the OCC, Cablevision and NECTA have raised concerns over the Telco's fulfillment of statutory requirements should it be permitted to offer a video product absent the imposition of CATV franchise requirements. For example, the AG urges the Department to make clear that any franchise award will require that competitive video service providers offer a basic service package consisting of public, educational and governmental programming, affordable to all consumers; make their video services available to all state residents and state businesses, regardless of geographic location; and make their video services available to all Connecticut residents on a stand alone basis and there should be no requirement that they be obtained in conjunction with, or "bundled" with, other services that may be offered by a video service provider. According to the AG, that basic service tier should include certain local programming, as well as public access, educational and governmental access programming. Lastly, the AG recommends that the Department should make clear that competitive video services be made available on a stand alone basis and that there be no requirement that they be obtained in conjunction with other, non-video services that may be offered by the video service provider. Id., pp. 3, 5 and 6.

Similarly, the OCC asserts that all providers of video services, regardless of the technology used retain public policy obligations to the localities and communities they serve. OCC Brief, p. 10. The OCC also asserts that full coverage for all areas of each municipality (perhaps tempered with a reasonable build-out period) should be principal objective to avoid "cherry-picking." Id., p. 15. Further, the OCC maintains that an enforceable rule in favor of net neutrality is necessary to ensure equal access to programming. Id., pp. 18-22.

Cablevision contends that the public interest does not support exempting the Telco from state cable franchising and regulatory requirements. Cablevision also contends that if the Telco's IP-video product is determined to not be a cable service requiring a cable franchise, the Telco would have broad freedom to avoid many of the obligations Connecticut has identified as critical for its residents. Cablevision cites as examples: payment of franchise fees; anti-redlining and buildout obligations; community access obligations; requirements ensuring safety of operations; parental controls; free service to libraries and schools; provision of institutional networks; studying local needs; funding local advisory councils; meeting privacy protections; providing leased access and local broadcast programming; ensuring access for the hearing-impaired; children's television; meeting customer service requirements; and promoting programming diversity. Cablevision Brief, pp. 13 and 14.

NECTA argues that absent a franchise, the Telco's offering of video programming would thwart many provisions of the federal Communications Act, as well as its Connecticut law counterpart. These include federal, state and Department requirements that prevent "creamskimming" and "redlining." NECTA also argues that the Telco would not be bound to follow the strict subscriber privacy requirements applicable to "cable operators." Additionally, the conditions under which the Telco offers video programming would not be subject to formal review to ensure that the overall package of terms and conditions offered to the public are comparable to those required to be offered by existing cable operators, as required under General Statutes § 16-

331(g). Further, NECTA claims that the Telco's silence regarding classification of its network for sales and gross receipts tax purposes speaks volumes regarding its commitment to the localities which it plans to serve. Lastly, NECTA argues that the Telco has not addressed: making available special equipment for the deaf and hearing impaired, subscriber refunds or credits for interrupted service, advance notice to subscribers regarding channel and rate changes, protections against substandard service, and customer service requirements, including what the Telco will comply with in the areas of complaint and billing dispute resolution, customer service office hours, penalties for reduction of service without notice, and limitations on charges for disconnection or downgrade of service. Nor has the Telco committed to federal requirements regarding customer service, providing or funding community access programming throughout its service area or funding or consulting with local cable advisory councils. Moreover, NECTA argues that exempting the Telco from cable television regulation will leave unprotected and unenforceable virtually all consumer protection, public interest and safety requirements that are applicable to cable operators through the franchising process; Connecticut residents, businesses, and public access users will get only what the Telco voluntarily chooses to give them, as a “favor.” NECTA Brief, pp. 18-21.

The Telco argues that legacy franchise regulations impose prohibitive entry barriers on new video providers. According to the Telco, when franchising requirements were initially established this was not the case. Rather, at that time, a cable franchise and its associated obligations were not impediments to competition, but instead a way to reach consumers. In the opinion of the Telco, today’s new entrants cannot compete if they are required to utilize an archaic cable deployment model as today’s networks grow top-down on a region-wide basis, rather than bottom-up from many different local networks. Telco Reply Comments, pp. 8-10. Moreover, the Telco convincingly argues that application of legacy requirements to its IP-video product would stifle technological innovation and at the same time deter meaningful competition. Id., p. 11.

The absence of public policy objectives presently applicable to IPTV or IPTV-like services will not preclude nor foreclose public policy debate over the need to develop and or address such objectives. It appears more likely that legacy public policy goals were developed in an era in which IPTV was not "on the table." The Telco acknowledged this likelihood by stating its commitment: ". . . to advancing the interests of municipalities and supports: Promotion of local and diverse voices; Commercial limits in children's programming; Providing community access; Ensuring disability access; Empowering families with parental controls; Sports Blackout Rules; Providing public Safety information; Carry all full-power local commercial and non-commercial educational broadcast stations."[29] While the Telco has made this commitment in other states, the Department expects nothing less in Connecticut.

In addition, as IP-video plans advance, the Department expects the Telco to assume other public policy requirements similar to those currently applicable to the state’s CATV providers. Such requirements consist of, but are not limited to consumer protection, public interest and safety requirements. In the opinion of the Department, the requirements contained in Conn. Gen. Stat. §§ 16-333c–16-333l list those

29 Late Filed Exhibit No. 10, Attachment A, p. 16.

requirements that should be assumed by the Telco when it begins offering its video product.

Notwithstanding the above, the Department notes that the public parties and NECTA have incorrectly argued that the Telco will engage in income discrimination (i.e., economic redlining). These parties have also questioned the Telco's intentions relative to facility build out absent the award of a CATV franchise. See for example, AG Brief, p. 5; Cablevision Brief, pp. 15-19; NECTA Brief, pp. 18 and 19; and OCC Brief, pp. 14-17.

The Department is not persuaded by these arguments. In general, use of the term "redlining" is for inflammatory reasons. Economic redlining when precisely used, connotes the intentional discrimination of specific segments of a population based on income or any other demographic factor. That is not the Telco's intent here. The Telco has indicated that it does not redline and will not do so in Connecticut. Tr. 12/7/05, pp. 297 and 298; Brief, pp. 26-28. The Telco also states that it will target investment and facility deployment based on those areas where it expects a higher tendency by its customers to purchase its services. Tr. 12/7/05, p. 296.

The Telco will be deploying its network facilities on a node-by-node or on a neighborhood-by-neighborhood basis so that all prospective consumers residing in those areas, regardless of income level, will have access to its services. Id., p. 306. Such a deployment plan does not bear the hallmarks of economic redlining. The Department finds the Telco's decision to invest and deploy network facilities in those areas where it expects the greatest initial return on its investment understandable and akin to the network deployment of the incumbent cable operators over the years. In the opinion of the Department, sound business practices require the Telco to invest and deploy its facilities in this manner. Accordingly, the arguments claiming economic redlining are hereby dismissed.

Similarly, the Department is not persuaded by arguments supporting imposition of mandatory build out requirements. To support a decision against establishing build out requirements, the Department need only turn to the Telco's DSL deployment performance, where its DSL footprint is over 90% in its Connecticut service area. Tr. 12/7/05, p. 308. This robust deployment has been achieved without Department mandates. As Project Lightspeed is an enhancement to the Telco's existing DSL footprint, the Department expects that over time, its video product will be offered to Connecticut consumers currently served by these facilities. In light of the Telco's brisk and comprehensive DSL deployment rate to date, the Department does not believe that a compelling need for build out requirements has been established or proven necessary at this juncture.

VI. FINDINGS OF FACT

1. The parent company of the Southern New England Telephone Company and the parent company of Verizon New York, Inc. have announced plans to offer video products in Connecticut.

2. SBC has announced its Project Lightspeed initiative, a $4 billion capital project that it claims will enhance the broadband capabilities of its existing communications network.

3. The planned enhancement of SBC’s DSL broadband networks will enable bandwidths and connection speeds that are not available over existing DSL or cable broadband networks.

4. The enhancement of SBC’s DSL broadband networks will support and integrate an array of voice, data, video and other applications.

5. Cable networks transmit the totality of available programming to all households at the same time, to be unscrambled in the customer’s set-top box pursuant to the customer’s purchase choices.

6. The Project Lightspeed network will entail a switched, two-way architecture designed to send each subscriber only the programming the subscriber chooses to view at a particular time.

7. The Project Lightspeed network will integrate IP-video with voice, data and other applications.

8. Verizon-NY's FTTP broadband network will have the potential to be deployed to provide video services.

9. Verizon expects that its proposed video product will meet the definition of cable service set forth in Conn. Gen. Stat. § 16-1(a)(15).

10. By letter dated September 16, 2005, the Department granted Verizon’s request to be dismissed from this proceeding.

11. IP is a form of packet switching that permits the two-way transmission of data from one computer to another on the Internet.

12. "Packet switching" refers to the protocol in which messages are divided into packets before they are delivered.

13. In an IP network, bits of data are segmented into packets that are individually addressed and then transmitted over a series of physical networks which may be comprised of copper, fiber, coaxial cable or wireless facilities.

14. Network routers examine the address of each passing IP packet, and determine to which other router in the network the IP packet should be sent.

15. When the packets reach their final destination over the IP network, they are "unwrapped" and the data inside is used for an application.

16. When the packets are transmitted via IP between two points, the network does not establish a permanent or exclusive path between the two points.

17. The Telco's IP-enabled video service will utilize IP technology.

18. Cable networks employ a tree and branch topology in which all households within a franchise area share programming signals transmitted concurrently on shared coaxial cable trees.

19. A typical cable system uses a one-to-many network design to deliver many program streams simultaneously to many subscribers over coaxial cable.

20. The Telco's IP network offers digital video signals only.

21. With IPTV programming, only the video data stream requested by the subscriber is transmitted between the Telco's servers and the customer.

22. Without downstream and upstream error correction, and network management data traveling back and forth in the IPTV connection between SBC and its subscriber, the service would not function.

23. Most CATV programming is delivered in a truly one-way path to a multitude of subscribers with little or no two-way or upstream communication.

24. Pulver.com's Free World Dial-Up Service is an Information Service.

25. The Telco will make available through a server, its video product together with its voice and data services.

26. The Telco's IP-video service will depend on constant communication between its servers and consumers.

27. IP set top boxes must select a specific IP address from which the data stream will circulate.

28. In the IP-based network, two-way capability and interaction is ever present, always requiring a dynamic interaction between the customer and network.

29. The Telco will be deploying its network facilities on a node-by-node or on a neighborhood-by-neighborhood basis.

30. The Telco's DSL footprint is greater than 90% in its Connecticut service area.

VII. CONCLUSION

Based on the above, the Department concludes that the IP-video product proposed by the Telco is merely another form of data stream transmitted over the Internet. In forming this conclusion, the Department has analyzed the Telco's video product in light of the federal and state definitions of what constitutes a cable service. The Telco has satisfactorily demonstrated that its IP-video product is a packet of data bytes streamed over a network fundamentally different from CATV networks, which has

the potential to offer consumers yet another, competitive application of Internet-based technology. Consequently, the Department will not require the Telco to seek a cable franchise before offering its video services.

DOCKET NO. 05-06-12 DPUC INVESTIGATION OF THE TERMS AND CONDITIONS UNDER WHICH VIDEO PRODUCTS MAY BE OFFERED BY CONNECTICUT'S INCUMBENT LOCAL EXCHANGE CARRIERS

This Decision is adopted by the following Commissioners:

Jack R. Goldberg

John W. Betkoski, III

Anne C. George

Donald W. Downes

Anthony J. Palermino

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Department of Public Utility Control, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Louise E. Rickard
Acting Executive Secretary
Department of Public Utility Control

Date