

U.S. Department of Energy
Set-Top Box Proceeding
March 7, 2012

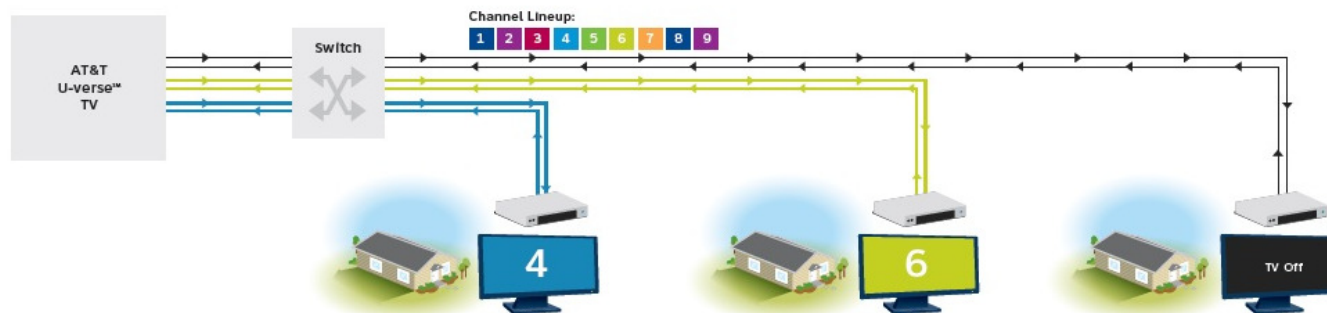
The High Points:

- AT&T's U-verse® receivers should not be regulated under EPCA.
- U-verse® receivers are already among the most energy efficient of the major video service providers, and AT&T continues to work to increase their efficiency.
- Regulation under EPCA, particularly if it mandates particular functionality, likely will suppress innovation and artificially channel product development, reducing efficiency over the long term.
- EPCA regulation would achieve minimal additional energy savings, at the cost of substantial industry distortion.
- Given the number of U-verse® receivers in the market, the service falls far below the statutory threshold for EPCA regulation.

AT&T U-verse

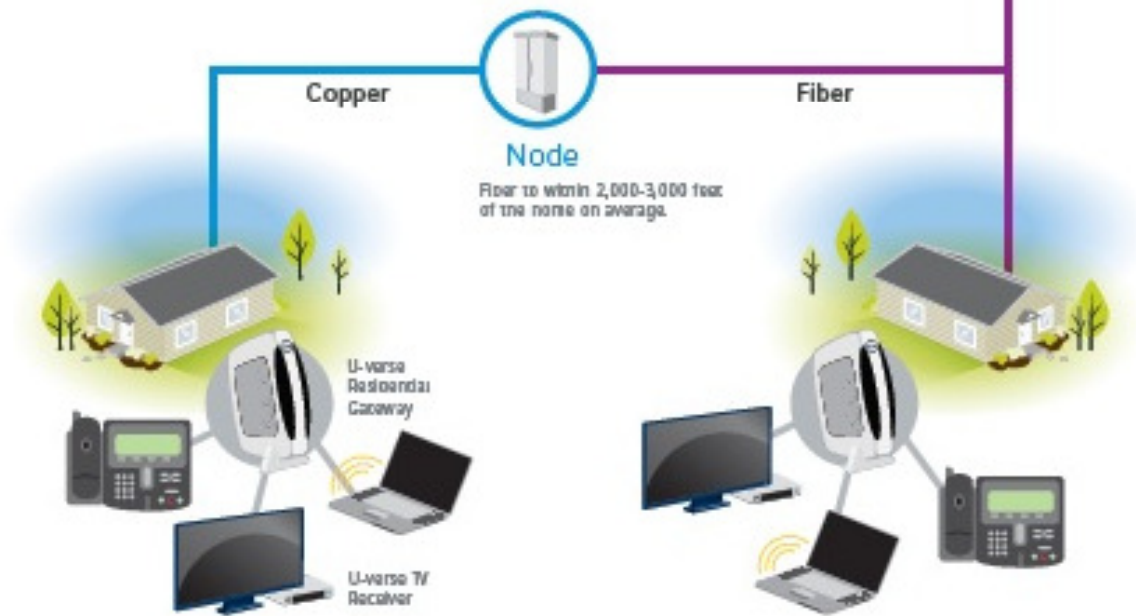
- Internet Protocol TV (IPTV), available in AT&T's 22-state footprint. Switched video carried over AT&T's fiber network.
- 3.8 million subscribers as of December 2011.
- The same distribution infrastructure carries customer voice service and Internet data traffic.
- Intelligence in the network streams only the desired programming to customer's U-verse® receiver. Consumer equipment does not have to extract desired channel from larger data stream.
- Efficient system design causes consumer equipment to use less power.

SWITCHED VIDEO



BROADCAST RF VIDEO





U-verse: Category of One

- AT&T U-verse® is essentially a category of one.
 - U-verse® is very energy efficient.
 - AT&T is only major provider in its product class.
- Demanding additional efficiency from this single provider – which already has some of the lowest consumption levels in the industry– would effectively penalize company that has been aggressive in pushing energy efficiency for years.
- Significant industry disruption and regulatory cost for very minor reduction in energy consumption.

Distinct from Over-The Top (OTT) Services

- “IPTV” is overly broad category for this proceeding.
- OTT box converts a single-source IP stream for viewing by a single user, typically with no additional features.
- Category of One: U-verse® is a managed service designed to deliver scheduled TV service to millions of people. Has significant additional (energy consuming) features:
 - ❖ Electronic Programming Guide
 - ❖ Favorites List
 - ❖ Picture In Picture
 - ❖ Encryption and access control for third party content
 - ❖ FCC’s MVPD obligations: Emergency Alert, Disability Access, Closed Captioning

U-verse : Efficiency and Evolution

- All receivers have been Energy Star certified since 2008.
 - ❖ Energy Star target for DVR receiver dropped from 216 kWh/yr (version 2) to 180 kWh/yr (version 3). Version 4 target for 2013 is 121 kWh/yr.
 - ❖ Energy Star target for non-DVR receiver dropped from 132 kWh/yr (version 2) to 105 kWh/yr (version 3). Version 4 target for 2013 is 63 kWh/yr.
- Meanwhile, U-verse® pursued innovation.
 - ❖ Additional functionality built into receivers for richer consumer experience.
 - ❖ Reduced household power consumption, with the Total Home DVR® – single central DVR that serves content to more energy-efficient, satellite receivers in household.
- Envision future when in-home equipment will support video entertainment; home monitoring and security; home healthcare; smart appliance and energy management.

DOE Regulation:

- Should not mandate -- explicitly or implicitly -- particular energy efficiency functionality like deep sleep.
- Functionality mandates dampen innovation, channeling new product developments along the line that DOE has prescribed, rather than allowing innovation to flourish and pursue energy efficiency from various different angles.
- Tight regulation of energy consumption could have prevented Total-home DVR® from coming to market.
- Could disrupt plans for multi-service in-home equipment.

Legal Authority:

- To support regulation, EPCA requires Secretary to determine that aggregate energy consumption for a product class exceeds 4.2 billion kWh/year.
- AT&T had 3.8 million U-verse® subscribers at the end of 2011.
- Given current energy consumption of AT&T's U-verse® receivers and their distribution in customer households, IPTV customer base would need to increase by a factor of 4 before it approached EPCA's statutory threshold.

Architecture Appendix

