DAS Advantages

- Aesthetically friendly installations
  - use of *existing* infrastructure
  - low site antennas
  - small, unobtrusive antennas

- Critical to wireless deployment:
  - Provides greater capacity for 3G, AWS and 700 MHz broadband services
  - Fill in coverage gaps in small areas
  - Provide broader coverage
  - Provide wireless coverage in areas that are difficult to serve because of topography

DAS Advantages (continued)

- One DAS network can support multiple wireless carriers
- DAS is "protocol agnostic" – supports CDMA, TDMA or GSM
- The result of these advantages … **Rapid Growth of DAS Is Possible**
- As of March 31, NextG had:
  - **1,340** operational Nodes and
  - **3,022** Nodes under construction

Access to Utility Poles is Essential for DAS Providers

- DAS networks are designed to be deployed on utility poles.
- DAS networks use multiple, low-sited antennas rather than one high-sited antenna. Therefore, traditional monopoles, towers, and rooftops do not work for DAS.
- Utility poles commonly are the only infrastructure option available to NextG. There is no "market" for poles.
- **If a utility denies access to poles or demands exorbitant pole attachment fees, the DAS network cannot be built.**

The Commission's Wireless Pole Attachment Policies

- Since 1998, the Commission's policy has been that wireless devices are "attachments" and are subject to the protections of Section 224. Order upheld by the Supreme Court in *Gulf Power* (2002).

- Fundamental Section 224 rights include:
  - Cost-based rates
  - Access may only be denied on the basis of "safety, reliability and generally applicable engineering purposes"

- FCC policy is summarized in the Wireless Bureau's 2004 Public Notice. *See* Attachment 1.

- But, there are no wireless-specific pole attachment rules. As a result …

Pole Owners Are Routinely Ignoring the Commission's Wireless Attachment Policies and Orders

- Excessive Pole Attachment Rates
- Denial of Access to Poles
- Severely Delayed Access to Poles
- Persistent Discriminatory Treatment of Wireless Third-Party Attachers

Pole Owners' Resistance to Wireless Attachments is A Significant Obstacle Facing NextG and Other DAS Providers

Utilities know that the Section 224 complaint process is expensive, lengthy and unpredictable, and therefore are willing to flaunt the Commission's policies and orders.

Utilities are Imposing Unreasonable Attachment Fees for Wireless Devices

- Demands for exorbitant "market" based rates are common (but not universal). Examples:
  - $1,200 or more per pole per year charged by power companies in multiple states (FL, IL, NV, NY, PA, OR, WA)
  - ExteNet's comments cited a rate of $1,564.50 imposed by a Florida utility.
  - T-Mobile cited rates of $1,200 to $3,000 per year.

- No negotiation - "take it or leave it"

- Utilities are trying to force NextG and others into the utilities' "business development" subsidiaries for attachment to transmission poles at unregulated rates.

NextG's Wireless Rate Proposal

- Wireless Attachment Rate:

  wireline telecom rate x feet of usable space occupied by the attachment

- Very easy to compute and apply

- The Commission should not permit utilities to charge a premium for pole top access because pole tops are not scare or unique.

  - Section 224 dictates that pole rates must be cost-based. There is no basis for different rates based on location on the pole.

Utilities are Denying Access to Utility Poles for Wireless Attachments

- Despite the FCC's orders, some utilities categorically deny access to poles.

- In comments, the Coalition of Concerned Utilities admit:

  > "wireless attachments raise a host of operational and safety concerns and ***each utility must make its own decision whether it is comfortable permitting wireless attachments*** on its electric distribution system."

- Florida Power & Light described how it denied access to pole tops in its comments

Wireless Attachments Are Safe

- NextG unequivocally supports **safe** and **reliable** wireless attachments on poles
- Despite utility "concerns" about safety, the fact is that no utility could city any safety incidents with wireless attachments on utility poles, despite the existence of such attachments on poles for at least 18 years.
- The safe attachment of wireless antennas on pole tops and in "supply space" on poles is expressly addressed by **NESC Rule 235I**. *See* Attachment 2.
- Only qualified-electric workers are permitted to work on wireless devices in the supply space on poles. (NESC Rule 235I(1) & OSHA regs).
- Utilities attach wireless devices on pole tops to support their operations (SCADA, AMR).

Utility Concerns About Safety Are Answered by Existing Standards and Regulations

- Clearances – NESC Rule 235I
- Worker Safety – OSHA Regulations 1910.97 and 1910.268
- RF Emissions – FCC Rule 1.1310 and OET Bulletins 56 and 65
- Pole Loading – NESC Sections 24 – 26
- Working Space on Poles – NESC Rule 237

Other Operational Concerns Raised by Utilities About Safety Are Unfounded

- Loading from antennas is insignificant. *See* Attachment 3 - study prepared by NESC expert David Marne.

- Pole loading from DAS communications equipment cabinets is relatively minor because the box weight is not significant and they are placed relatively low on the pole, which minimizes stress. *See* Attachment 3.

- ILECs and power companies routinely attach devices, such as transformers, telecommunications equipment boxes and power supply boxes and on poles that have an equal or greater impact on pole loading. *See* next page for pictures.