



# The 2002 National Electrical Code -- An Update



**Telcordia Contact:**  
James E. Brunssen  
973-829-2977  
jbrunsse@telcordia.com  
April 11, 2000

An SAIC Company

Telcordia Technologies Proprietary – Internal Use Only  
This document contains proprietary information that shall be distributed, routed or made available only within Telcordia Technologies, except with written permission of Telcordia Technologies.

# Introduction

- The NEC is published by the National Fire Protection Association (NFPA)
  - Issued every three years -- 1999 Edition is latest version
  - Covers installations of electric conductors and equipment (including communications) within or on public and private buildings or other structures
- Unlike other “voluntary” standards, the NEC carries the force of law
  - Adopted by many municipalities and local authorities
  - Used by the local Authority Having Jurisdiction (AHJ) for electrical inspection

## Introduction, Cont'd

- NEC Code-making process
  - Twenty Code-making Panels
  - Panel representatives appointed by NFPA
    - Organization representatives covering broad industry segments or interest groups
      - Examples include ATIS, NECA, IBEW, etc.
    - Individual members (special experts) to fill need for particular expertise on a Panel
- Telcordia represents ATIS on Panel 1 (scope), Panel 5 (grounding), Panel 15 (reserve power), Panel 16 (communications), and on the Technical Correlating Committee having oversight responsibility for the Code-making process

## Introduction, Cont'd

- Process began with the issuing of the 1999 NEC
  - Interested parties (individuals, industries, organizations) submit proposals to revise the 1999 NEC
  - Panels review proposals falling under their purview
  - Panel action and substantiation on each proposal published in “NEC Report on Proposals” available free from NFPA
  - Interested parties submit comments on proposals and Panel actions
  - Panels meet to consider comments, determine final action
  - Panel action and substantiation on each comment published in “NEC Report on Comments” available free from NFPA
  - New NEC gets final approval at NFPA Annual Meeting

# Important dates for the 2002 NEC

<b>Date</b>	<b>Event</b>
August 5, 1998	1999 NEC issued
Nov. 5, 1999	Proposals to revise the NEC due to NFPA
Jan. 10-22, 2000	Panels review proposals to revise the NEC
July 14, 2000	Report on Proposals (ROP) issued by NFPA
Oct. 27, 2000	Comments due to NFPA by 5:00 PM EDT
Dec. 4-16, 2000	Panels review comments to proposed revisions to the NEC
April 16, 2001	Report on Comments (ROC) issued by NFPA
May 20-24, 2001	NFPA Annual Meeting - 2002 NEC approved
July 22, 2001	NEC issued by NFPA Standards Council

## NEC activity to date

- Panels have met to consider proposed changes to the 1999 NEC
  - Over 4500 change proposals were received by NFPA
  - 24 proposals were submitted on behalf of ATIS by Telcordia
    - Proposals posted on ATIS web site for comment prior to 11/5/99 due date
    - One comment received
- Preliminary results
  - 19 ATIS-approved proposals either accepted or accepted in principle
  - Five proposals rejected
  - Results are preliminary as Panel action may change based on public comments, floor action at the NFPA Annual Meeting

# Panel action on major ATIS-approved proposals

- Permit limited number of communications wires and cables above suspended ceilings (Arts. 725, 760, 770, 800, 820, 830)
  - Accepted in principle
  - Proposed Panel 16 change permits up to three wires or cables to be placed on a suspended ceiling tile
  - NEC presently does not permit wires or cables on ceiling tiles
- Limit length of telephone primary protector, CATV grounding conductor in one- and two-family residences to 20-feet, maximum (Articles 800, 820, and 830)
  - Accepted
  - Relief provided if 20-foot limitation can not be met
    - Drive separate communications ground rod, bond back to power ground

## Panel action, Cont'd.

- Restrict bonding and grounding connections to cold water pipe to first five feet of building entrance (Articles 800, 810, 820, 830)
  - Accepted
  - Eliminates concerns over increased use of plastic plumbing
- Revise Article 90 to state that NEC is not retroactive
  - Rejected
    - Panel 1 accepted new Article 80, *Administration and Enforcement*
    - Article 80 contains new requirements on NEC retroactivity
- Permit communications attachments to power service mast (Articles 230, 800, 820, and 830)
  - Rejected
  - Controlled by Panel 4
    - Concern for safety of electricians who must work around communications attachments when maintenance of service mast is required

## Additional areas of interest

- Proposed change to require removal of abandoned cable
  - Abandoned cable defined as cable not connected to equipment or identified by a tag for future use
- Independence of Chapter 8 (communications) maintained
  - Panel 1 accepted Technical Correlating Committee Task Group proposals solidifying independence of Chapter 8
- Utility “exemption”
  - No change in NEC coverage for facilities under the exclusive control of the communications utility
    - Facilities such as telecom utility central offices, huts, and vaults not covered by the NEC

## What's next in the Code-change process?

- NFPA issuance of the NEC Report on Proposals
  - Provides the opportunity for all interested parties to review the change proposals, Panel actions, and Panel statements
  - Provides the opportunity for public comments
- Telcordia will prepare and submit comments on proposed NEC changes, as appropriate, on behalf of ATIS
  - Proposed comments posted on ATIS web site by 9/27/00
  - Suggested changes to comments should be provided to Steve Barclay or Jim Brunssen by 10/20/00
  - Telcordia will submit ATIS-approved comments to NFPA by 10/27/00
- Telcordia will represent ATIS interests in the Panel review of comments during the 12/4-16/00 Panel meetings

## Final steps in the Code-change process

- Attendance at NFPA Annual Meeting, May 20-24, 2001
  - Review final proposed changes to the NEC
  - Pursue floor action as necessary
  - Vote to approve the 2002 NEC
- The 2002 NEC is scheduled to be issued by the NFPA Standards Council on July 22, 2001

## Questions, comments, suggestions????

- Please contact me with any questions that you might have regarding the Code-change process or ATIS-approved proposals or comments.

Jim Brunssen

973-829-2977

[jbrunsse@telcordia.com](mailto:jbrunsse@telcordia.com)