Knitting Together the Codes and Standards for the Electric Vehicle Infrastructure – An Industry Perspective

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Knitting Together the Codes and Standards

- Existing Infrastructure
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- Existing Infrastructure
- Product Safety Standards
  - Certification
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- Installation Codes
  - Electrical
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- Interoperability Standards
  - Communication / Performance
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# EV – Electrical Codes and Standards

## Grid
- **NESC** – National Electrical Safety Code
- **National Electrical Code** – Article 625
- **Canadian Electrical Code** – Section 86

## Building, Public Parking, Home
- **SAE J1772** – Charge Coupler and Cord Set
- **SAE J2847-1 & J2836-1** – Communication Std - PHEV/EV and utility grid
- **SAE J2847-2 & J2836-2** – Communication Std - PHEV/EV and Charging Station
- **SAE J2847-3 & J2836-3** – Communication Std - PHEV/EV and utility grid for reverse flow
- **SAE J2894** – Power Quality for PEV Chargers
- **IEEE P2030.1** – Guide for Electric-Sourced Transportation Infrastructure

## Product Specific
- **IEEE P2030.1** – Guide for Electric-Sourced Transportation Infrastructure
- **SAE J2293** – Energy Transfer System for EV
  - Part 1: Functional Requirements and System Architecture
  - Part 2: Communications Requirements and Network Architecture
- **SAE J2847-1 & J2836-1** – Communication Std - PHEV/EV and utility grid
- **SAE J1772** – Charge Coupler and Cord Set
  - Level 1 - SAE J1772
    - 120Vac, 16A max
  - Level 2 - SAE J1772
    - 240Vac, 80A max

## UL Safety Standards
- **UL 2202** – EV Charging System Eqpt
- **UL 2231** – Personal Protection for EV supply circuits
- **UL 2251** – Plugs, Recept and Couplers for EV
- **UL 2594** – EV Cord Sets & Charging Stations

## National Electrical Code – Article 625
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Thank You!

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