



# Objective Based Industrial Electrical Code (OBIEC) Initiative

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Report to Alberta Electrical  
Industry Codes and Technical  
Committee

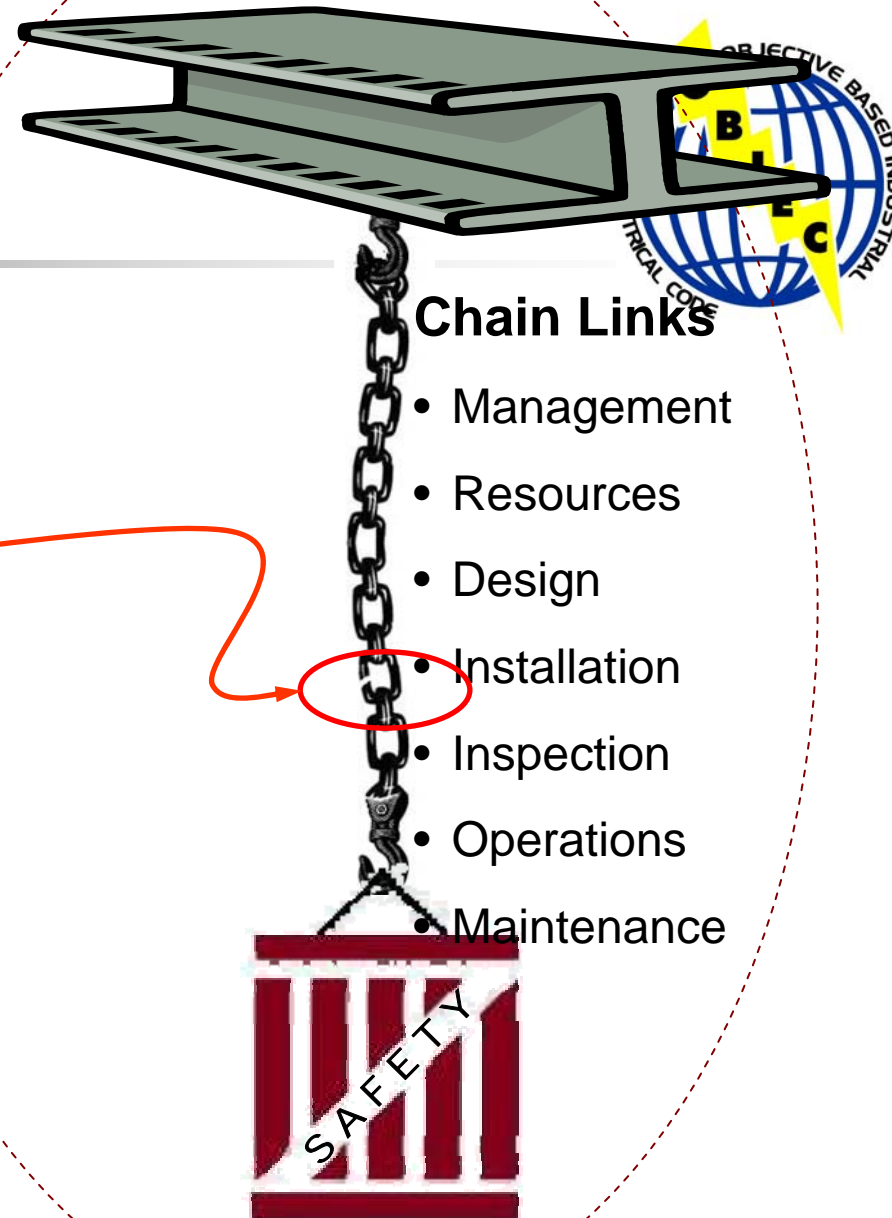
# Why an OBIEC



- Prescriptive Codes
  - Cannot keep pace with changing technology
  - Restrictive – Barrier to new technology
  - Inhibits design creativity and innovation
- Objective Codes
  - Stable
  - Provide design flexibility
- Improved Safety
  - Management systems approach
  - Continual improvement
  - Cradle-to-grave
- Cost savings
- One window approach – single registry recognized nationally
- Better owner/user control over complete electrical installations

# Traditional Approach

- Like a chain, is only as strong as it's weakest link.
- The safety system we've used for many years is a linear one.
- What do we do or have in place to make sure we have no weak links?

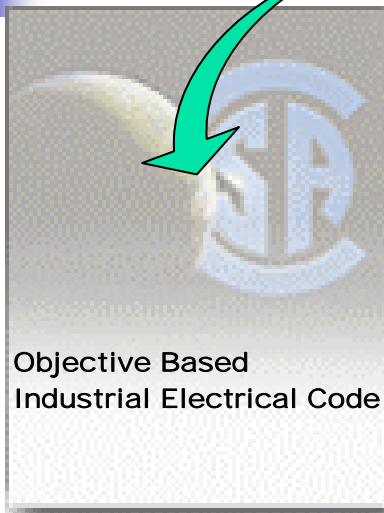


## Chain Links

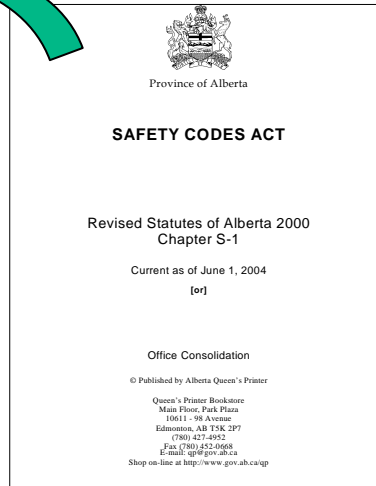
- Management
- Resources
- Design
- Installation
- Inspection
- Operations
- Maintenance

# Objective-Based Approach

## What is the OBIEC?



Objective Based  
Industrial Electrical Code



### SAFETY CODES ACT

Revised Statutes of Alberta 2000  
Chapter S-1

Current as of June 1, 2004  
[or]

Office Consolidation

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Queen's Printer Bookstore  
Main Floor, Park Plaza  
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### (SMS) Safety Management Plan

Reference documents

- CEC
- NEC
- IEEE
- IEC

- Limited to qualified sophisticated users
- Requires an administrative mechanism for implementation
- Implemented through an accountability framework
- Management systems approach is a viable option

# Objective-Based Approach OBIEC & SMS – How does it work?



Regulatory Oversight - Policy

Independent  
3<sup>rd</sup> Party Audit



Management Commitment

- Resources
- Design
- Equip. Selection
- Installation
- Verification
- Inspection
- Operations
- Maintenance
- Records
- Internal Audit
- Corrective Action



May 2, 2006

AEIC&TC - Jasper AB



# OBIEC Initiative - recap



- Agreement with CSA to develop – April 2003
- Inaugural CSA Technical Committee meeting – Oct. 2003
- OBIEC Content Subcommittee and Safety Management System Subcommittee begin standards development
- 1<sup>st</sup> Drafts of OBIEC and SMS submitted – June 2006
- 2<sup>nd</sup> Drafts ready – Nov. 2006
- Issues Task Force is struck to resolve differences between stakeholders – Nov. 2006
- 3<sup>rd</sup> and final drafts expected by June 2008
- Published documents by Dec. 2008
- Implementation of pilot projects by Dec. 2008
- Provincial (some provinces) recognition in 2009
- National recognition by 2012



# Issues Task Force



- Consolidated comments into 7 categories
  - Benchmarking was the 1<sup>st</sup> category; and addressing this resolves almost all issues
- From a **“safety” perspective**
  - CEC Part I to be used as the installation benchmark
  - CEC Part II to be used as the product selection benchmark
- Include Guideline Annexes in SMS
- These recommendation will be presented to the OBIEC TC at CSA Annual Conference in June 07
  - For inclusion in the next Draft Standards



# CSA / IEEE

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- Intent to co-brand the OBIEC & SMS Standards
  - Integrate specific IEEE standards with the OBIEC
- CSA & IEEE signed MOU to co-operate on standards development

# Fund Development



- Budget
  - CSA Project Management - \$ 700k
  - Fundraising, education, promotion - \$ 400k
  - Estimated volunteer and industry secondment - \$1.5m
- Total funds received to Dec. 31, 2006:
  - **\$ 480,000.00** (of which **\$355,000.00** is from 8 CAPP members)
- Remaining funds to acquire: ~\$ 620k
- Contributions welcome!!

# Conclusion



- The OBIEC & SMS will provide industrial users with
  - Increased design flexibility
    - Access to global technologies
    - Innovative solutions
  - Increased safety
    - not only at time of construction but throughout the life of the facility (cradle-to-grave)
  - Cost savings
- CSA process provides for National Consensus Standards uniformly applied across Canada
  - Goal to have a single registry recognized by every province
- More funding is required to complete the OBIEC Initiative