

SCS Global Services does hereby certify that an independent assessment has been conducted for:

CTC Global Corporation

2026 McGaw Avenue, Irvine, CA, United States

Validation Scope:

SCS reviewed CTC's Conductor Comparison Program (CCP) for its validity in calculating line losses and the resulting CO₂ emissions for Aluminum Conductor Composite Core (ACCC) and Aluminum Conductor Steel-Reinforced (ACSR) transmission line technologies. ACCC is a conductor which has the potential to reduce electrical transmission losses and associated CO₂ emissions. The certification was conducted in accordance with ISO 14044:2006 standard for Life Cycle Assessment (LCA), a methodology used for evaluating the environmental performance of various products.

Validation Opinion:

Assuming installations where ACCC substitutes for ACSR lines of similar design characteristics and identical operating conditions, ambient conditions, and grid power generation mix, SCS is able to substantiate the following claims:

- SCS certifies that use of the ACCC technology in lieu of ACSR will reduce line losses and associated CO₂ emissions by 27-31% over the following range of parameters:
 - Line length: 20 to 60 miles
 - Diameter: 0.7 to 1.3 inches
 - Voltage: 110 to 400 kV
 - Peak operating amps: 650 to 2700 amps
- SCS certifies use of the CCP tool as a reasonable way to estimate reductions in line losses and associated CO₂ emissions achieved by installing ACCC in lieu of ACSR technologies.
- SCS confirms, and has no reason to doubt, that use of the ACCC technology in lieu of ACSR will reduce line losses and associated CO₂ emissions in general settings.

Certificate # SCS-EPP-00003

Valid from: November 1, 2016 to October 31, 2019



A handwritten signature in black ink that reads 'Stanley Mathuram'.

Stanley Mathuram, PE, Vice President
SCS Global Services
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