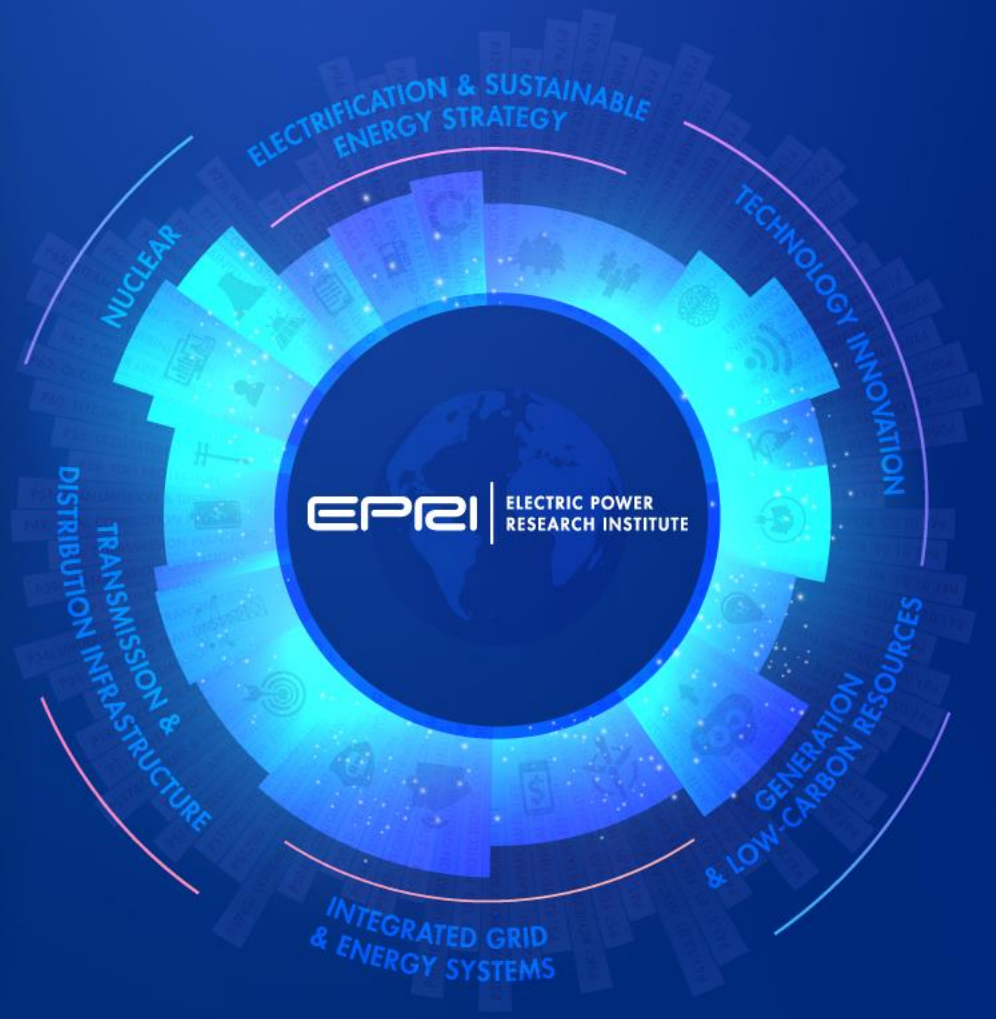
ACCUG Guidelines Documents

ACCUG 2022

Andy Howell
September 13-14, 2022



Air Cooled Condenser Users Group

http://acc-usersgroup.org/

ACC.01: Guidelines for Internal Inspection of Air-Cooled Condensers

Original Issue: May 12, 2015
Revision due: May 12, 2018

Chairman, ACCUG:

Dr. A. G. Howell
Xcel Energy
Henderson, Colorado, USA
Email: andy.howell@xcelenergy.com

ACCUG Steering Committee Members:

Gary Bishop
GWF Energy, LLC
Pleasant Hill, California, USA
Email: gbishop@starwestgen.com

Dr. R.B. Dooley
Structural Integrity Associates
Southport, Merseyside, UK
Email: bdooley@structint.com

Hoc Phung
PG&E
San Francisco, California, USA
Email: hqp1@pge.com

David Rettke
NV Energy
Las Vegas, Nevada, USA
drettke@nvenergy.com

René Villafuerte
Falcon Group - Comego
Ramos Arizpe, Coahuila, Mexico
Email: rvillafuerte@comego.com.mx

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http://acc-usersgroup.org/

ACC.02: Guidelines for Finned Tube Cleaning in Air-Cooled Condensers

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Chairman, ACCUG:

Dr. A.G. Howell
Electric Power Research Institute
Palo Alto, California, USA
Email: ahowell@epri.com

ACCUG Steering Committee Members:

Riad Dandan
Dominion Energy
Richmond, Virginia, USA
riad.n.dandan@dominionenergy.com

Oscar Hernandez
Saavie Energia
Mexico City, Mexico
Oscar.Hernandez@saavienergia.com

Dr. R.B. Dooley
Structural Integrity Associates
Southport, Merseyside, UK
Email: bdooley@structint.com

David Rettke
NV Energy
Las Vegas, Nevada, USA
drettke@nvenergy.com

http://acc-usersgroup.org/

ACC.03: Guidelines for Air In-leakage in Air-Cooled Condensers

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Chairman, ACCUG:

Dr. A.G. Howell
Electric Power Research Institute
Palo Alto, California, USA
Email: ahowell@epri.com

ACCUG Steering Committee Members:

Riad Dandan
Dominion Energy
Richmond, Virginia, USA
riad.n.dandan@dominionenergy.com

Rishikesh Velkar
NV Energy
Nevada, USA
Rishikesh.Velkar@nvenergy.com

Dr. R.B. Dooley
Structural Integrity Associates
Southport, Merseyside, UK
Email: bdooley@structint.com

http://acc-usersgroup.org/

ACC.04: Guidelines for Wind Mitigation in Air-Cooled Condensers

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Chairman, ACCUG:

Dr. A.G. Howell
Electric Power Research Institute
Palo Alto, California, USA
Email: ahowell@epri.com

ACCUG Steering Committee Members:

Riad Dandan
Dominion Energy
Richmond, Virginia, USA
riad.n.dandan@dominionenergy.com

Rishikesh Velkar
NV Energy
Nevada, USA
Rishikesh.Velkar@nvenergy.com

Major Contributor:

Gary Mirsky

Email: GMirsky@galebreaker.com

Dr. R.B. Dooley
Structural Integrity Associates
Southport, Merseyside, UK
Email: bdooley@structint.com

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ACC Guidelines Documents

Current

- Internal Inspections
- Finned Tube Cleaning

Pending

- Air In-leakage
- Wind Mitigation

Future

- ??

ACC.03: Guidelines for Air In-leakage in Air-Cooled Condensers

Introduction
Effects of Air In-leakage
Recognizing the Presence of Air In-leakage
Leak Detection
- tracer gas
- IR camera
- acoustic detection
- other

Application of Air In-leakage to Air-Cooled Condensers
- size / volume
- connections
- heat transfer tube steam entry
- number of potential leak locations
- access for testing
- outdoor environment
- ACC fans and air movement
- leak repairs

Common Locations of AIL in Air-Cooled Condensers
- welds
- valves
- expansion joints
- bolts
- corrosion
- ACC rupture disks
- piping under insulation
- previous leak repairs

Prioritization of Air In-leakage Repairs
Air In-leakage program
Conclusions
References
Figures
Definitions

ACC.04: Guidelines for Wind Mitigation in Air-Cooled Condensers

Introduction

Effects of Wind on ACCs

- fan performance and condenser vacuum
- mechanical equipment degradation

Identifying the Presence of Wind-Induced Problems

Wind Mitigation Approaches

- initial design
- retrofits
- prioritization of mitigation options

Evaluating the Effectiveness of Mitigation Efforts

- condenser performance
- equipment degradation / failure

Wind Mitigation Program

Conclusions

References

Figures

Definitions

Discussion