

NCEA Panel Discussion: FERC, NERC & CIP Compliance

- *FERC Compliance Implementation & Documentation Challenges*
- *NERC Compliance Fit Into Corporate Compliance Effort*
- *High Level Overview of CIP Challenges*

Disclaimer: Views are officially those only of Kenna, Bob and Kelly, and all examples given assume hypotheticals

VISION Be the
Energy Partner of Choice.

MISSION IMPROVING
Life with Energy.

COMPANY VALUES



AGILITY

We embrace change and challenge ourselves to adapt quickly to opportunities.



COMMUNICATION

Consistent, open and timely communication keeps us focused on our strategy and goals.



CREATING VALUE

We are committed to creating exceptional value for our shareholders, employees, customers and the communities we serve ... always.



CUSTOMER SERVICE

We are committed to providing a superior customer experience every day.



INTEGRITY

We hold ourselves to the highest standards based on a foundation of unquestionable ethics.



LEADERSHIP

Leadership is an attitude. Everyone must demonstrate the care and initiative to do things right.



PARTNERSHIP

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RESPECT

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FERC Compliance Program



- FERC Electric and Gas Compliance Programs officially implemented January 1, 2011
 - Compliance with applicable laws was occurring—formal policies and procedures were not in place
- Blank slate to create compliance programs
- Engaged outside counsel to provide gap analysis

Challenge with Documentation

- Need to be able to demonstrate compliance with the applicable laws
- Keeping records and managing filing requirements is time consuming
- Currently utilize several tools to track records
 - Outlook account (calendar, tasks, email)
 - Spreadsheets
 - Compliance Log
 - Policies and Procedures

Case Study

- Quarterly Certification for FERC and NERC non-compliance
- Manual Process of creating mailing lists, sending email with attachment, collecting signatures, maintaining spreadsheet
- Developed automated process with a link to the form (data stored on the server)
 - Completed electronically using log-in and password
 - Automatically separate forms with comments
 - Different security levels for reviewing information

Compliance Log



- Web-based site that documents compliance issues that need to be tracked
 - Used by electric, gas and non-regulated compliance groups
- Varying security levels to review and add information
- Reporting functions and management tools



Legal Compliance System :: LCS

[Home](#)
[Forms](#)
[Lists](#)
[Reports](#)
[Help](#)
[Admin](#)
[Logout](#)

[khagan] 09/12/2011 14:42

Links

[Issue List and Search](#)

- [New Electric issue](#)
- [New Enserco issue](#)
- [New GSS issue](#)

This Past Month

New Issues

ID	Bus Unit	Subject	Owner	Date	Desc	Rep	Email
158	Electric	Communication	Kenna Hagan	09/06/2011			
157	Electric	Communication	Kenna Hagan	09/06/2011			
156	Electric	Affiliate Restrictions	Kenna Hagan	08/24/2011			

Revised Issues

ID	Bus Unit	Subject	Owner	Rev Date	Desc	Rep	Email
156	Electric	Affiliate Restrictions	Kenna Hagan	09/06/2011			
153	Electric	SOC	Kenna Hagan	09/06/2011			
152	Electric	SOC	Kenna Hagan	09/06/2011			
149	Electric	Documentation	Kenna Hagan	09/06/2011			
146	Electric	Compliance Program	Kenna Hagan	09/06/2011			

User Notes

Pending

Proc Changed

Sticky Notes



Aug 24, 2011 12:09 Wendy, please review issue 156 related to the GE Workout session [K.Hagan]



Aug 01, 2011 16:26 Pat, please review issue 142 regarding the gas training to see if it is accurate. [K.Hagan]



Jun 27, 2011 14:57 Pat, can you please review ID 136 to see if it accurately reflects our discussion this afternoon? Do you think it would be helpful to have a checkbox that we could check other business units if we thought the issue might be applicable to them? So, ID 136 is an Enserco issue, but I think it would be neat to have a check box to identify that this issue might also be of use to you in GSS. [W.McCord]

Rolling Notes



Legal Compliance System :: LCS

- Home
- Forms
- Lists
- Reports
- Help
- Admin
- Logout

[khagan] 09/12/2011 14:46

Cancel

New Issue

Subject*

Status: Pending

Source:

Owner: Hagan, Kenna

Business Unit: Electric

BU Group: Electric Compliance

Compliance: NERC

Report Date*: 09/12/2011

Occurrence Date*: 09/12/2011

Procedural Change? No

Proc Change Date:

Applicable Rules: [0 / 250]

Issue Description:
[0 / 3000]

Large text area for issue description

Add assessments and comments

Assessment

Text area for assessments and comments

Add file links

+ Add link

File - ex: H:\Folder\myfile.doc

Description

Table with columns for File and Description

Submit

Need for Dedicated Resources

- Creating dedicated position to meet compliance requirements is key
 - Review based on performance, integrated with goals
 - Adding compliance as an additional duty means it often gets attended to last
- Cost of compliance vs. non-compliance
 - Management likes to have steady costs to achieve budget goals. Non-compliance is unknown
- Need for technology resources and support
 - Creates efficiencies for heavily administrative processes

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PARTNERSHIP

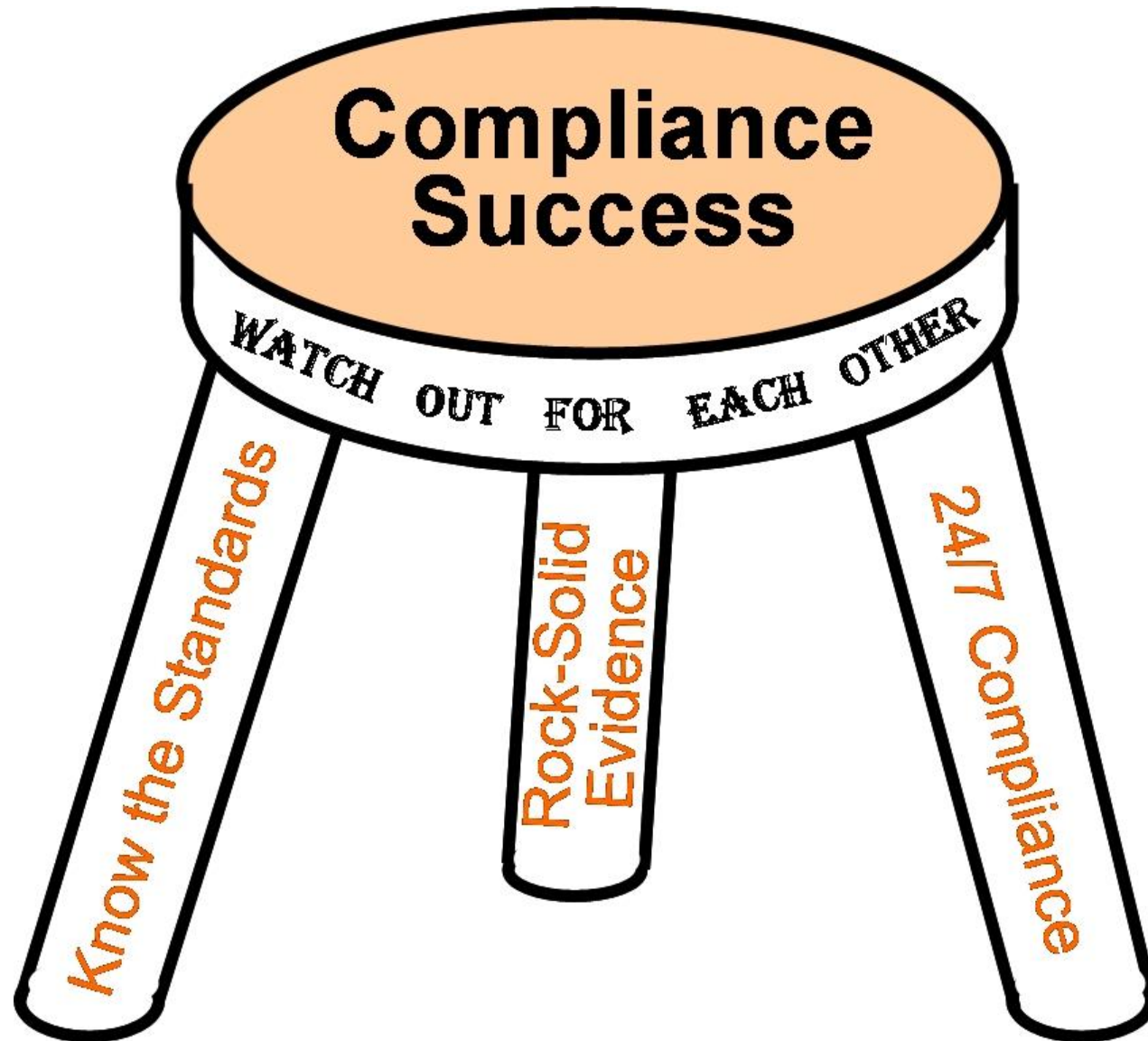
Our partnerships with shareholders, communities, regulators, customers and each other make us all stronger.



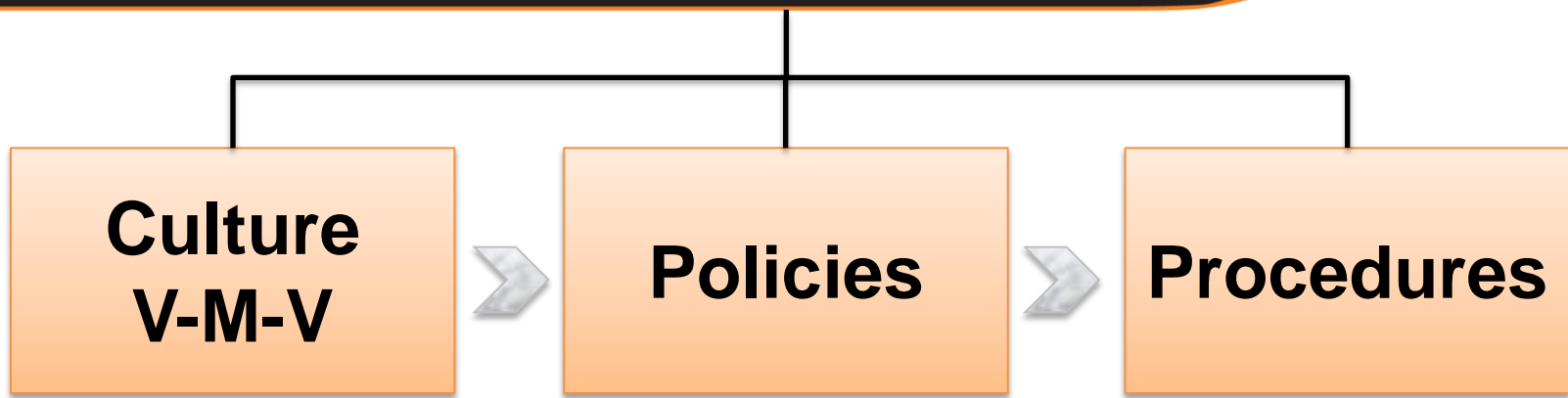
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How Does BHC “Do” Compliance?



BHC's NERC ICP Components



- ✓ Company Values
- ✓ Corporate Code of Business Conduct
- ✓ NERC Compliance Mgr Acts as a Facilitator
- ✓ Compliance is Owned by Operations
- ✓ Compliance is Executed by Operations
- ✓ Compliance is Assessed by Operations

- ✓ ICP Program Approved by Corporate Committee
- ✓ Patterned after other BHC Group Compliance Programs
- ✓ Supported by a NERC Leadership Team
- ✓ With Defined Roles
- ✓ And Accountability

- ✓ Annual Internal Compliance Reviews
- ✓ OATI webCompliance
 - Standards Awareness
 - Evidence Archives
 - Tracking Progress
- ✓ Training
 - NERC Refresher
 - Sabotage ID
 - Security Awareness
- ✓ NERC Compliance Communication Plan

- **3→4 NERC Registered Entities**
- **~ 100 Reliability & Security Standards**
- **~ 1,000 Requirements**

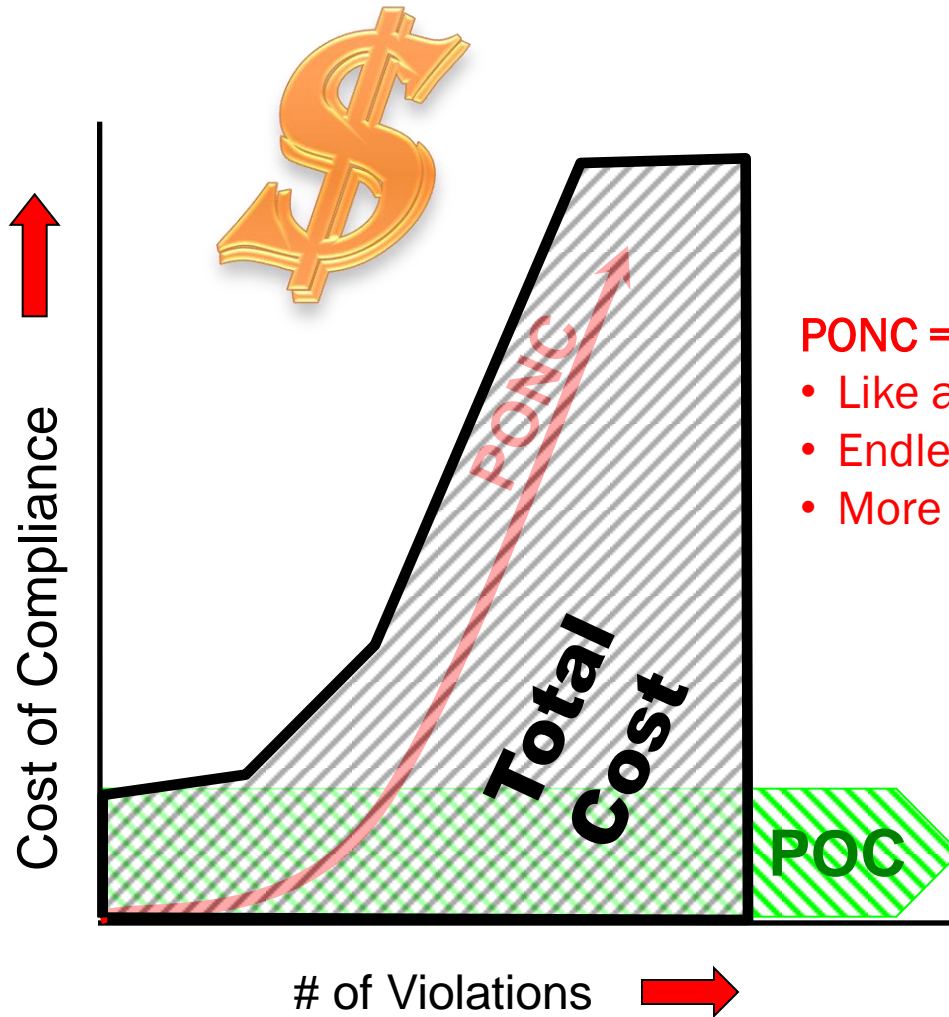
OATI webCompliance

- **Central Library of Standards Info**
- **Secure Library for Compliance Evidence**
- **Tracking for Everything to be Done**
- **All with Complete Audit Trails**



Selling Management on the Value of Doing it “Right” Up Front

The “Cost” of Non-Compliance Speaks Volumes



Cost of Compliance =

Price of Compliance +
Price of Non-Compliance

PONC = Price of Non-Compliance

- Like a Dark Cloud Hanging Over Entity
- Endless Reporting & Follow-Up
- More Opportunities for New Violations

POC = Price of Compliance

- Labor of Love
- No Pain - No Gain
- Will Perform the Way You Train

Tie Economic Benefit to Company Culture

- Documented Costs are Just One of Many ‘Levers’
- Incurred Penalties may be a Small Part of the Total Compliance Cost
- If the Company ‘gets’ their Culture, they will ‘get’ the total Cost of Compliance
- Instill Understanding that Rigorous Compliance with NERC Standards is Part of Good Utility Practices and Business Continuity Efforts
- Provide the Tools which allow all the NERC Stakeholders to Engage in the Compliance Effort
- Keep NERC Compliance Communication on same Level as Sarbanes-Oxley, OSHA, Safety, etc. to reinforce the Corporate Compliance Culture

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NERC CIP Challenges

Awareness

Stuxnet/Malware



Resources



Night Dragon /Hackers



Accidents/Mistakes

- People
 - Dedicated resources to NERC vs. utilizing existing staff
 - Technical staff to develop processes and maintain compliance
 - Security and/or Compliance staff to document, monitor, audit and report
 - Dedicated time to develop understanding
 - How/where to use outside resources and maintain internal expertise

- Outsource Options
 - Vendors are capitalizing on customer needs
 - Some vendors are over-selling their capabilities/expertise
- Automate Manual Processes
 - Minimize manual processes to reduce risk of non-compliance
 - Requiring people, time and technology
- Audit Preparation
 - Organize and produce compliance evidence

Additional NERC CIP Challenges



- Interpretation of standards
 - Wording of some standards occasionally gives false confidence in compliance
 - Guidance has not been consistent
- Going from a non-regulated cyber environment to a regulated cyber environment
- Going from the focus of “reliability” to a focus of “reliability and compliance”
- Balance of security and compliance

- Planning and Tracking Configuration Strategy
 - Documenting Ports and Services
 - Documenting Changes (patches, upgrades, etc.)
- Collecting and Archiving Logs
- Collecting and Archiving Compliance Data
- Managing Vulnerability Scans
- Monitoring and responding to NERC Alerts

FERC NERC CIP—Panel Discussion



QUESTIONS?

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Kelly Wrede

Director Technology Services

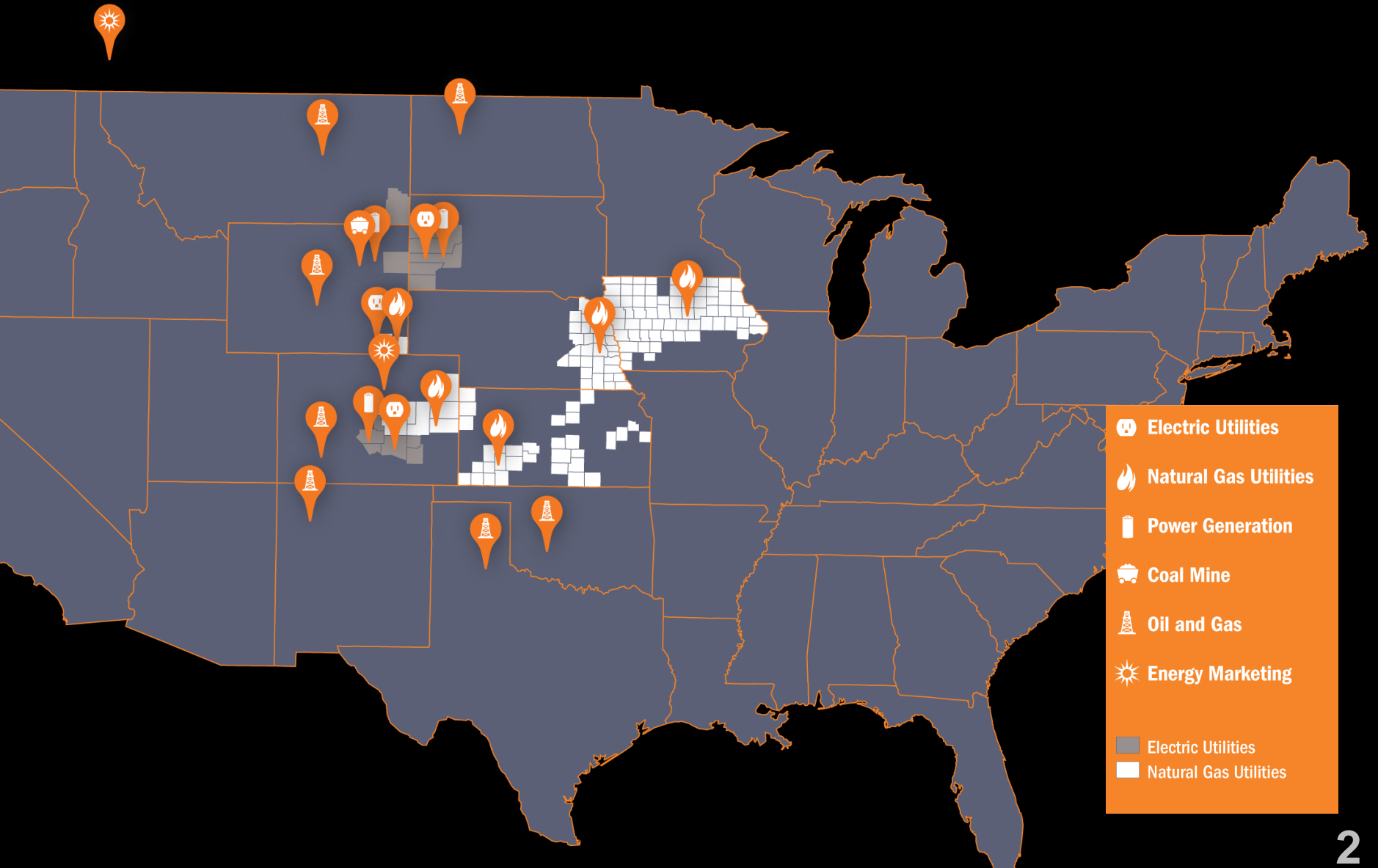
(605) 721-2108

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Extra Background Slides Follow

Black Hills Corporation



Characterize BHC Utility Operations

- Three Different Entities Registered with NERC
- Two are Functionally Registered within NERC as
 - TO, TOP, TSP, GO, GOP, TP, RP, LSE, DP & PSE
- Regional Entity = WECC, considered medium-sized utility
- Generation Capability = 600MW - 22 Plants in 3 States
- Peak Load = 950MW
- Miles of BES Transmission
 - 800 miles of 230KV & 265 miles of 115KV
- Control Centers = 3 Primary Centers plus 2 Backup
- AC-DC-AC InterTie = 200MW Transfer Capability
- Electric Customers Served = 200,000
- **NERC Compliance Department of 2.0 FTE's**
...Plus everyone else in the corporation

How Much Resource Does “NERC” Take?

Early Industry Estimates Suggested 100 Hrs/Entity/Year

- **Senior Counsel – 150 Hrs/Yr**
- **Engineering – 5,000 Hrs/Yr**
- **Transmission Planning – 880 Hrs/Yr**
- **Internal Audit – 1,300 Hrs/Yr**
- **Reliability Center – 800 Hrs/Yr**
- **“NERC Compliance” Dept – 4,160 Hrs/Yr**

Rough Actual Guess for BHC is ~ 12,400 Hrs/Yr