



The INGAA Foundation, Inc.

2019 ANNUAL MEETING PLANNING & STUDIES MEETING



Monarch Beach Resort
Dana Point, California
October 31, 2019





The INGAA Foundation, Inc.

OPENING COMMENTS

Lauren O'Donnell

Chairman, Planning & Studies Committee

Antitrust Compliance Guidelines

In all Foundation activities, you must avoid any discussion or conduct that might violate the antitrust laws or even raise an appearance of impropriety.

- **Commitment**

The INGAA Foundation and its member companies are committed to full compliance with all laws and regulations, and to maintaining the highest ethical standards in the way we conduct our operations and activities. **Our commitment includes strict compliance with federal and state antitrust laws, which are designed to protect this country's free competitive economy.**

- **Responsibility for Compliance**

Compliance with the antitrust laws is a serious business. Antitrust violations may result in heavy fines for corporations, and in fines and even imprisonment for individuals. **You bear the ultimate responsibility for assuring that your actions and the actions of any of those under your direction comply with the antitrust laws.**





The INGAA Foundation, Inc.

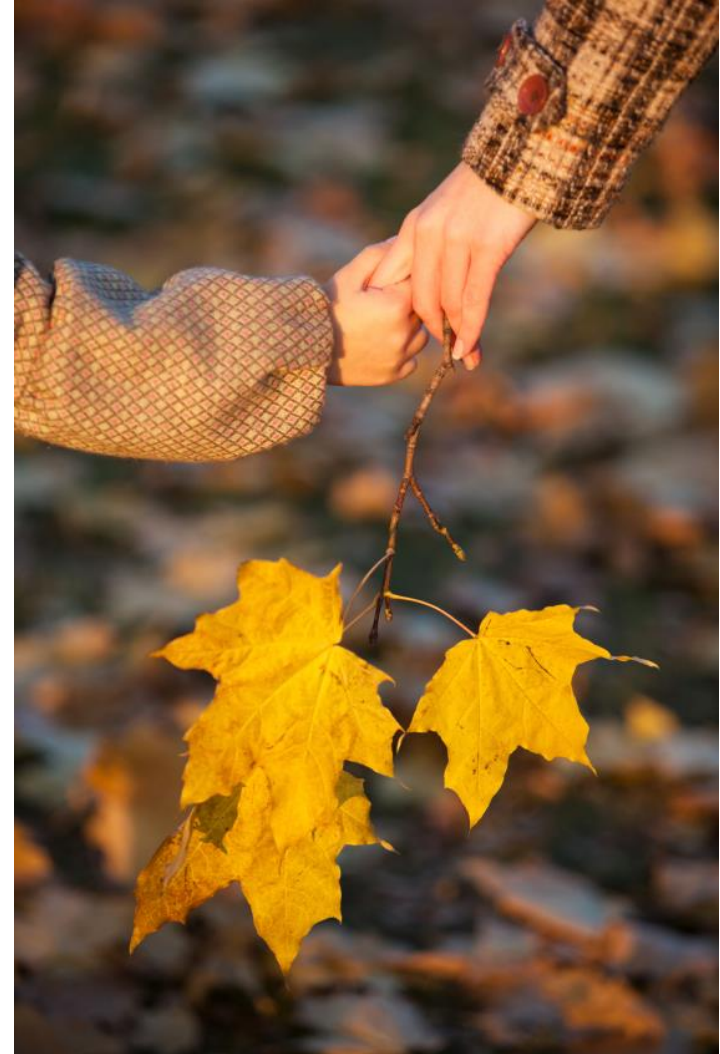
SAFETY MOMENT

Mike Istre

Project Manager, The INGAA Foundation

Fall Season Safety Tips

- Fire Safety Tips for Fall
- Safety Tips for Fall Driving
- Safety Tips for Fall Boaters
- Home Maintenance



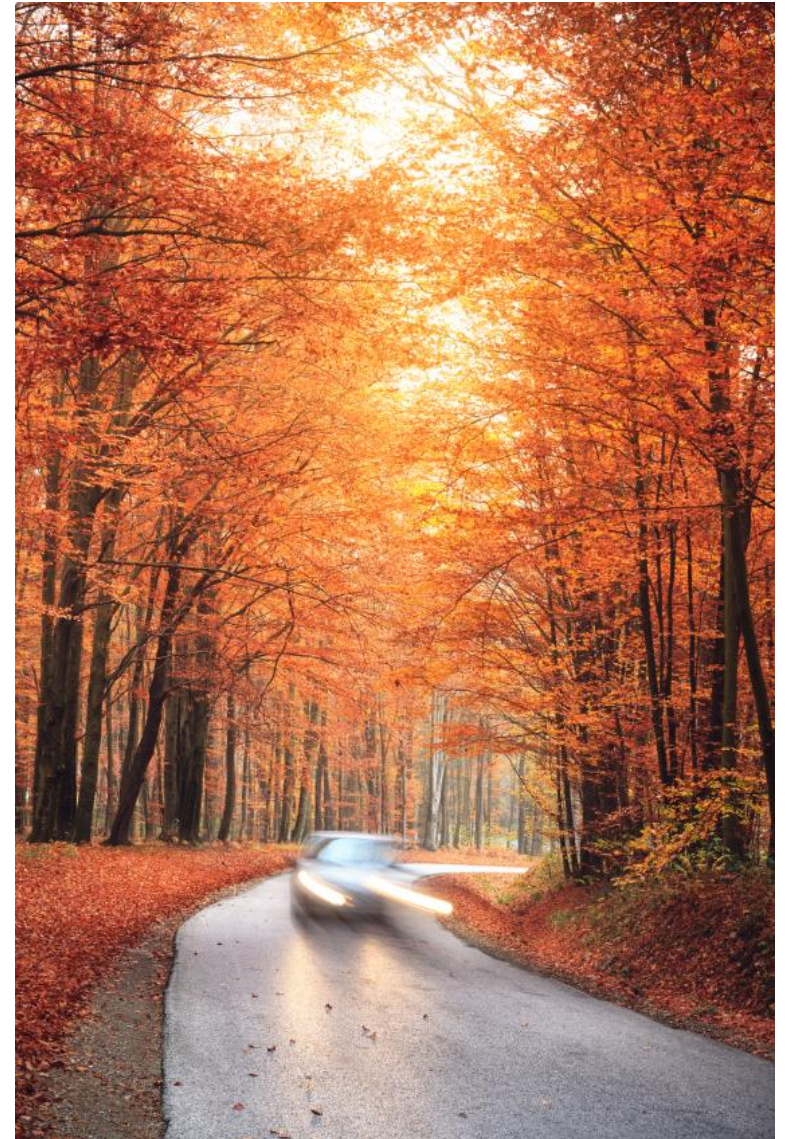
Fall Fire Safety

- Service your furnace
 - Call a professional
- Use Fireplaces Safety
 - Use a fire screen
 - Never leave it unattended
 - Make sure the fire is out when you go to bed
- Change Smoke Alarm Batteries
 - Check the expiration date on fire extinguishers
- Use Caution with Space Heaters
 - Check the instructions for venting if needed
 - Never use your stove or oven as a space Heater
 - Allow 3 ft of empty area around the heater
- Reconsider Leaf Burning
- Exercise Candle Caution



Safety Tips for Fall Driving

- Be Aware of Poor Visibiltiy
 - Falling leaves, rain, fog
 - Use low beams in bad weather
- Watch for Children
 - Leaf piles on the curbside
 - Low light for school buses
- Slow Down on Wet Pavement
- Be Prepared for Bright Sunlight
 - Late sunrise puts the light in your eyes at commute time
- Watch out for Ice



Safety Tips for Fall Boaters

- According to US Coast Guard, autumn boating accidents are far more likely to be fatal than summer months.
- Be Prepared for Changing Weather
- Watch for Signs of Hyperthermia
- Tell Others About Your Trip
- Always Wear Life Jackets



Home Maintenance Safety Tips

- Look up before pruning trees
- Use caution on ladders
- Clean up fallen leaves





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REVIEW OF CURRENT STUDY STATUS

Mike Istre

Project Manager, The INGAA Foundation

Current Study Status Summary

| ID | Project | Category | Oversight Committee | Overall Completion (%) | Notes |
|---------------------------------|--|-----------|-----------------------|------------------------|---|
| Project 2019-1 | Pipeline Project Life-Cycle Security | Workshop | Safety | 100 | Workshop held on May 15 |
| Project 2019-15 | Ambient NO2 AERMOD Project Continuation | Report | Environment | 100 | Complete. |
| Project 2019-2 | Compressor Station Emissions | Report | Environment | 63 | Target sites selected. Requested data from operators |
| Project 2019-21 | Practical Risk Rankings for Construction Quality | Guideline | Quality & Integrity | 100 | Complete. CSG Posted to Website |
| Project 2019-23 | Enhancing Safety and ROW Inspections | Workshop | Quality & Integrity | 100 | Complete. Final report posted to workshop resource page |
| Project 2019-25 | Safety Culture Workshop | Workshop | Safety | 100 | Workshop combined with INGAA mtg. Sept 10 in Nashville, TN |
| Project 2019-27 | FERC 201 Workshop #8 | Workshop | Environment | 91 | Complete. Final report pending. |
| Project 2019-3 | Supporting API RP 1162 and RP 1173 | Other | Public Policy & Comm. | 83 | Awarded to Capital Results. Test areas have been selected with three pipeline operators |
| Project 2019-32 | Continuation of AEL Workshop Series | Workshop | Public Policy & Comm. | 100 | Reallocated to 2019-5 |
| Project 2019-5 | America's Energy Link (AEL) | Other | Public Policy & Comm. | 80 | Awarded to PSS. Presentation @ Annual Meeting |
| Project 2019-6 | Best Practices for Tribal Engagement | Workshop | Public Policy & Comm. | 98 | Final report currently under committee review |
| Project 2019-9 | Steep Slope Construction Workshop | Workshop | Quality & Integrity | 65 | Workshop scheduled for November 14, JW Marriott, Houston, TX |

Bookends of Workshops

Most Active Tribes

- Standing Rock Sioux
- Rosebud Sioux
- Oglala Sioux
- Cheyenne River Sioux
- Crow Creek Sioux
- Sisseton Wahpeton Oyate
- Lower Brule Sioux
- Navajo



Sisseton Wahpeton Oyate



Cheyenne River Sioux



Tribal Flags Seen at HWY 1806 Main Gate to Meyer Property



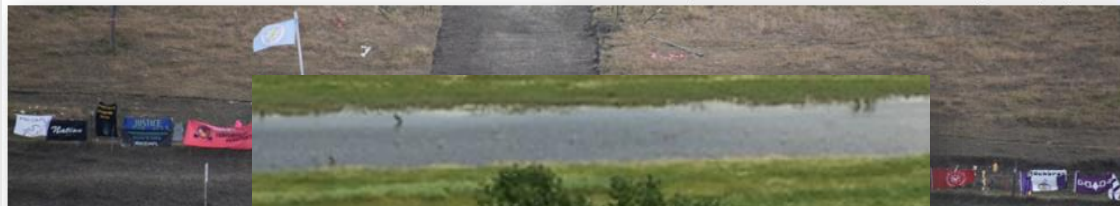
Standing Rock Sioux



Crow Creek Sioux



Rosebud Sioux



At least 100



"Black Snake Killaz"



AIM Supporters at Camp Site



BLM's Symbol to Express Solidarity for Standing Rock (top image) and BLM Supporters at Camp Site (bottom image)



Pictured Right: Palestinians Protestors Donning Flag and Head Garb at Mandan Courthouse Protests



Bookends of Workshops





The INGAA Foundation, Inc.

2020 PROPOSED BUDGET

Tony Straquadine

Executive Director, The INGAA Foundation

2020 Proposed Budget

| | | Proposed 2020 Budget |
|---|--|----------------------|
| Ordinary Income/Expense | | |
| Income | | |
| Total Membership Dues | | 2,124,500.00 |
| Workshop Fees | | 112,500.00 |
| Total Reimbursements | | 85,000.00 |
| Miscellaneous Income | | 18,000.00 |
| Credit Card Processing Fee | | 3,500.00 |
| Registration Fees | | 249,900.00 |
| Total Investments | | 64,000.00 |
| Total Income | | 2,657,400.00 |
| Expense | | |
| Studies and Projects | | |
| Programmatic Marketing Campaign | | 100,000.00 |
| FERC 201 Workshop #9 | | 45,000.00 |
| Design guideline for avoiding P/L slips | | 50,000.00 |
| Instructional Video Series #1 | | 30,000.00 |
| Reduction of Serious Injuries and Fatalities WS | | 10,000.00 |
| Leading Safety Indicators Workshop | | 27,000.00 |
| Fatigue Management Workshop | | 20,000.00 |
| Workforce Training and Recruitment Workshop | | 56,000.00 |
| Routing Workshop | | 18,000.00 |
| Tribal Engagement Workshop #3 | | 60,000.00 |
| Post Construction Acceptance Criteria | | 15,000.00 |
| Safety Culture Workshop & Survey | | 100,000.00 |
| 2020 Studies and Projects Total | | 531,000.00 |
| Standing Committee Expenses | | 60,000.00 |
| Total Studies and Projects | | 591,000.00 |

| | | |
|---|--|---------------------|
| Non-Study Expenses | | |
| 60100 · General Operating Expenses | | |
| Personnel Costs | | 912,300.00 |
| Travel and Related Expense | | 125,000.00 |
| 60400 · Meeting Expenses | | |
| Total Meeting Expenses | | 620,000.00 |
| 60500 · Administrative Costs | | |
| 2020 Office Moving Expense | | 114,700.00 |
| Total Administrative Costs | | 241,300.00 |
| Rent | | 67,100.00 |
| Professional Services | | 20,000.00 |
| Total Legal/Accounting | | 77,200.00 |
| Insurance | | 14,700.00 |
| Total General Operating Expenses | | 2,077,600.00 |
| Total Public Affairs Costs | | 20,000.00 |
| Total Non-Study Expenses | | 2,097,600.00 |
| Miscellaneous Expenses | | 1,500.00 |
| Total Dues & Contributions | | 10,000.00 |
| Total Expense | | 2,700,100.00 |
| Net Income | | (42,700.00) |





The INGAA Foundation, Inc.

STANDING COMMITTEE CHAIRMEN UPDATES

Lauren O'Donnell

Chairman, Planning & Studies Committee



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SAFETY COMMITTEE

Victor Flores



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SAFETY COMMITTEE UPDATE

Victor Flores, Sr. Director Construction & Quality Management

Enable Midstream Partners

2019 Committee Activities

(In Addition to Planning & Studies)

- LESSONS LEARNED REPOSITORY (LLR)
 - Current Chair: Chris Smith, Cheniere Energy
 - 2019 LLR Stats
 - 57 Submittals in 2018
 - 42 Submittals in 2019
 - 35 Safety Related
 - 7 Quality Related
 - THANKS TO ALL WHO HAVE SUBMITTED TO LLR!!!
 - Spring LLR Meeting on 2/19/2019 in Houston (Chair, Scott Long, Kinder Morgan)
 - Panel discussion: How INGAA Foundation Members are using the lessons learned repository to improve the safety and quality within their organizations
 - How to improve safety performance by focusing on serious injury and fatality (Scott Long & Brian Seaman, Kinder Morgan)
 - What is coming?
 - Updated User Interface w/ mobile browser support (early 2020)
 - Foundation Members – Challenge yourselves to participate more!
 - CEPA Participation



2019 Committee Activities

(In Addition to Planning & Studies)

- PIPELINE CONSTRUCTION SAFETY ROUNDTABLES (PCSR)
 - Spring Meeting on 2/20/2019 in Houston (Chair – Kelly Langston, Construction Medicamp; Vice Chair, Roy Edwards, Enbridge)
 - Theme was Fitness for Duty
 - Fatigue management
 - Drug & Alcohol topics
 - Fall Meeting on 10/1/2019 in Houston (Chair – Nate Healy, Michels; Vice Chair – David Miller, Boardwalk)
 - Transfer of Knowledge Panel
 - Tie-in Safety & Pipe Hauling and Stringing Panels & Roundtables
 - Workforce Competency - RADM Lorin Selby, Deputy Commander for Ship Design, Integration and Engineering, SEA-05, Naval Sea Systems Command (NAVSEA)
- CONSTRUCTION SAFETY & QUALITY GUIDELINES



2019 Committee Activities (In Addition to Planning & Studies)

- CONSTRUCTION SAFETY & QUALITY GUIDELINES
 - CS-R-16 Steep Slope Construction (Issued 1/9/19)
 - CS-G-08 Leading Safety Indicator Program Guidance (Issued 5/29/2019)
 - CS-S-12 Trenching Excavation Guidelines (Refresh issued 6/5/2019)
 - CS-G-13 Vehicle Safety (Refresh issued 9/3/2019)
 - CS-G-11 Traffic Control (Refresh underway)
 - CS-R-15 Tie-in Safety Guideline (Under development – Using information from PCSR plus programs received)
 - CS-R-10 Pipe Hauling and Stringing Safety Guidelines (Under development)
 - CS-S-6 Fall Protection / Working at Heights (Under development)





The INGAA Foundation, Inc.

PUBLIC POLICY & COMMUNICATIONS COMMITTEE

Susan Waller



The INGAA Foundation, Inc.

ENVIRONMENTAL COMMITTEE

Jeff Benefiel



The INGAA Foundation, Inc.

QUALITY & INTEGRITY COMMITTEE

UPDATE – 2019 ANNUAL MEETING

Jason W. Leger

Manager of Quality, Sunland Construction, Inc.

Quality & Integrity Committee Members

- Jason W. Leger, Sunland Construction, Inc. – Chairman
- Amy Presson, Duke Energy – Vice Chairman
- Andy Duncan, Enbridge
- Dave Coffin, EVRAZ
- Bob Sprick, Gulf Interstate
- Joe Williment, TransCanada (replaces Sonya Kirby)
- Jon Connaway, Michels
- Kimberly Tarr, Boardwalk Pipeline
- Chuck Harris, T.D. Williamson
- Pierre Bigras, PG&E



2019 – 2020 FOCUS AREAS REVIEW

- Stress free Tie-in's / Lowering-In Best Practices.
- Backfill and Compaction Best Practices.
- Inspector Certification Metrics (How well is it working?)
- Post Construction Acceptance Criteria.
- Gap Analysis of INGAA C-QMS document and API 1177
- Steep Slope Construction Best Practices.
- Technology Show Case (i.e. smart glasses)



Revised 2020 FOCUS AREAS

| Potential 2020 Focus Areas | | | | |
|---|---------------------------|---|------------------|---|
| | Topic | Issue | On-going Efforts | Future Efforts for Consideration |
| Material Quality Management - Ensure material selection and material manufacture meets the quality standards of the Industry | | | | |
| 1 | Pipe Specification | Pipe not meeting specifications including strength and ERW long-seam toughness | | 1. Consider a roundtable meeting on steelmaking and pipe making. 2. Define key control points for steelmaking and pipe manufacturing (tensile properties, toughness, out of roundness, etc.) 3. Create common specification |
| 2 | Fitting & Bends | Pipe not meeting specifications including strength and improper alloys | | Creation of common specification |
| 3 | Inspection Test Protocols | Implement Leading practices for inspection of materials and equipment during fabrication. | | Create typical ITP for major materials to owner/operator use in ensure quality materials and equipment |



Revised 2020 FOCUS AREAS

| Worker Competency & Experience - Enhance worker knowledge and hazard awareness around quality issues (construction, inspection, engineering, manufacturing, etc.) | | | |
|---|----------------------------|--|--|
| 1 | Stress Free Tie-ins | Girth weld failures particularly at tie-ins | Proposed 2020 Project to video construction activities as training tool for industry employees to enhance awareness of lowering-in and tie-in welding issues and best practices. |
| 2 | Backfilling and Compaction | Line pipe damaged in handling, backfilling and grading | 1. Potential Future project to video construction activities as training tool for industry employees to enhance awareness of backfilling and compaction issues and best practices. 2. Roundtable on backfilling and restoration and how to prevent damage to pipe. |
| 3 | Girth Weld Coating | Improper girth welding coatings leading to corrosion and failures | 1. Potential Future project to video construction activities as training tool for industry employees to enhance awareness of girth weld coating issues and best practices. See also the Standards Item # 5. |
| 4 | Incorrect Operations | Reduce/prevent occurrence of failures to operating facilities caused by incorrect operations particularly during abnormal operating conditions and during construction activities. | Formalize and implement leading practices for crafting complete job plans. |



Revised 2020 FOCUS AREAS

| Standards - Create common design, construction and inspection standards which enhance quality | | | |
|---|---------------------------------------|---|--|
| 1 | Automatic Welding | Need for common parameters and inspection protocol | Create common standard |
| 2 | Horizontal Directional Drilling (HDD) | Mud Control, preparation, large volume inadvertant returns | On-going development of a Recommended Practice for Horizontal Direction Driling under the auspices of API. 1. Roundtable on HDD - planning, preparation, installation control, etc. Coordinate timing to provide input to the API RP on HDD design and installation [[Has this already occurred?]] |
| 3 | Steep Slopes | In-service failures on newly installed pipe on steep slopes and base of slopes | Proposed 2020 Project to create Design Guideline for avoiding pipeline slips on hillsides. |
| 4 | Post-Construction Acceptance Criteria | Proving the quality of new construction for acceptance by owner/operator | Proposed 2020 Project for Workshop on Post-Construction Acceptance Criteria to identify what we are doing today, opportunities to improve , and suggestions for future state, [[Not currently funded; will advance to next year if not funded this year]] |
| 5 | Girth Welding Coating | Widely varying owner/operator requirements for coating challenges repeatability of achieving and quality work product | 1. Develop common specification / procedures and inspection protocol for FBE girth weld coating including standardization on key parameters such as surface prep/anchor pattern, min/max pre-heat temps, min/max coating thickness, min/max abrasive resistant overlay, etc. See also Worker's Competency Item #3. |



Revised 2020 FOCUS AREAS

| Operations & Maintenance | | | |
|--------------------------|---|---|--|
| 1 | Third Party Damage Prevention - Excavation Damage | High failure rates due to failure to utilize 811 programs. | Talking points and program to discuss with federal and state regulators and lawmakers the appropriateness and effectiveness of existing One-Call exemptions and enforcement programs. |
| 2 | Third Party Damage Prevention - Vehicular Damage | High failure rates associated with 3rd party vehicular damage to pipeline systems adjacent to roadways. | Formalize and implement leading practices for protecting pipeline facilities from vehicular damage; workshop for determining leading practices in preventing vehicular damage to pipeline facilities and produce leading practices document. |
| 3 | Temperature Effects on pipeline operations | High failure rates associated with equipment freeze offs | Formalize and implement leading practices to control the effects of cold temperatures in areas that are likely to be susceptible to the threat. |
| 4 | Utilization of threaded connections | High failure rates associated with use of threaded connections on high pressure natural gas systems. | Formalize and implement leading practices for utilization of threaded connections on natural gas pipeline systems. |
| Integrity Management | | | |
| 1 | Manufacturing Defects - Hard Spots | Potential in-service failures due to hard spots in the pipeline. | Identification of and best practices to remediate pipeline hard spots. |
| 2 | | | |



STUDIES UNDERWAY / TO BE FUNDED...

- Stress Free Tie-in Video
 - Steering committee is lead by Kim Tarr
 - Group has been formed and have had 2 calls to discuss steps forward.
- Steep Slope Construction Practices.
 - 4 potential members have expressed interest.
 - Still need someone to step up as Champion of the steering committee.
- Post Construction Acceptance Criteria
 - Hope to get funding
 - If not, still plan to begin work on the topic and have proposed workshop for next year.



Thank you





The INGAA Foundation, Inc.

REVIEW OF PROPOSED STUDIES

Lauren O'Donnell

Chairman, Planning & Studies Committee

| Proposal Number | Study Title | Estimated Cost (\$1k x) | Rating 1 to 10 |
|---------------------|--|-------------------------|----------------|
| 3 | Programmatic Marketing Campaign | 100 | 8.24 |
| 9 | FERC 201 Annual Workshops: Workshop #9 | 45 | 8.16 |
| 10 | Integrating Renewable Power into Natural Gas Pipeline Operation* | - | 7.87 |
| 14 | Design Guidelines for Avoiding Pipeline Slips on Hillsides | 50 | 7.51 |
| 15 | Instructional Construction Video Series: Stress Free Tie-ins | 30 | 7.18 |
| 5 | Reduction of Serious Injuries and Fatalities (SIF) | 10 | 7.00 |
| 7 | Leading Safety Indicators Implementation Case Studies and Next Steps Workshop | 27 | 6.85 |
| 6 | Fatigue Management Workshop | 20 | 6.81 |
| 1 | INGAA Foundation 2020 Workforce Training & Recruitment Workshop | 56 | 6.71 |
| 2 | Bridging Pipeline Routing, Community Engagement and Landowner Interaction: Workshop and Best Management Guidelines | 18 | 6.60 |
| 4 | Best Practices for Tribal Engagement | 60 | 6.54 |
| 16 | Post Construction Acceptance Criteria | 15 | 6.28 |
| 8 | Safety Culture Workshop – A Comparison & Analysis of Safety Culture Survey Results | 100 | 6.26 |
| Budget Limit | | | |
| 13 | Determine Metrics to Evaluate the Success of OQ and Inspector Certification | 35 | 6.25 |
| 12 | Right-of-Way Maintenance BMP Comparison | 30 | 5.88 |





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NEW BUSINESS

Lauren O'Donnell

Chairman, Planning & Studies Committee



The INGAA Foundation, Inc.

PLANNING & STUDIES PROCESS UPDATE

Mike Istre

Project Manager, The INGAA Foundation

Updates for 2020 based on Member Feedback

- The Spring Meeting purpose is now focused on brainstorming of ideas based on the focus areas identified by the Standing Committees. **The rating of ideas is removed from this meeting.**
- The open solicitation of ideas from the membership will now occur after the Spring Meeting.
- The August Planning & Strategy meeting is now focused on presentation and discussion of proposals. **The rating of proposals has been removed from this meeting** to allow Proposal Sponsors to incorporate feedback from the membership.
- **The Annual Meeting now incorporates the rating of study ideas for ranking.** This eliminates a lag period between the August meeting and Annual meeting, provides a larger audience for rating, and makes the meeting significant in the process.



Steering Committee Volunteers

- If you want to volunteer to be on a project steering committee, the form is now live:
- <https://ingaafdn.memberclicks.net/2020-volunteer-form#/>
- You will need to have your new login credentials. See Rachel if you have any problems
- The Standing Committees are currently fully seated for 2020 except for Public Policy and Communications. We need both Operators and Service Providers. See me or Monique Roberts if you are interested.





The INGAA Foundation, Inc.

CLOSING REMARKS

Lauren O'Donnell

Chairman, Planning & Studies Committee

EVENING ACTIVITIES

New Member & First Time Attendee Reception

Grand Lawn / 5:30 pm



Welcome Reception

Grand Lawn / 6:00 pm

