

# ***Pipeline Research Council International***

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## **Technical Committee Plenary**

*Fall TC Meetings*



**LEADING PIPELINE RESEARCH**

**Mike Stackhouse**  
*Interim Vice President, Operations*

Hyatt Regency Dallas  
October 2024



# Introductory Remarks



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# Safety Moment

# Antitrust compliance is everyone's responsibility

PRCI is a not-for-profit organization with a diversity of members who are competitors, suppliers and customers.

PRCI meetings and functions shall not be used as a forum to obtain unlawful individual company advantages or to achieve anti-competitive objectives for any segment of PRCI's membership.

Accordingly, PRCI requires members to avoid any conduct that might violate, or would create the appearance of a violation of, the antitrust laws.

*PRCI's [full antitrust guidelines](#) are available on PRIME.*

## OUR MISSION

Foster an international, industry-wide collaborative community that:

- Delivers innovative applied research, and
- Develops the means for stakeholders to leverage/implement the research

## OUR VISION

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To be the preeminent global technical resource advancing the safety, reliability, and sustainability of energy pipeline infrastructure.

# Welcome New Members

## Pipeline Members



## EFI Members



## TPAM



## Coming in 2025

**EPRI** *(PIO+EFI 2025)*  
**South Bow** *(PO 2025)*

## Research Execution Team (Primary/**Backup**)



**Tom Marlow**

*Director of Research  
(I&I)*



**Dorothy Lam**

*Quality Assurance  
Program Manager*



**Carrie Greaney**

*Sr. Program Manager  
(CO<sub>2</sub>, **SOM**)*



**Jim Wayman**

*Sr. Program Manager  
(I&I, **CORR**, **SBS**)*



**Angie Mallahan**

*Sr. Program Manager  
(DMC, **SBS**, **MEAS**)*



**Carolyn DesCoteaux**

*Sr. Program Manager  
(EFI, **CPS**, **UGS**)*



**Janie Norton**

*Sr. Program Manager  
(**CORR**, **SOM**, **DMC**)*



**Cassandra Guzik**

*Program Manager  
(**MEAS**, **UGS**, **CPS**)*



**Mark Pelkey**

*Contract PM  
(**SRP LD**)*



**Michael Thomas**

*Contract PM  
(**EFI**, **SRP GHZ**)*

# PRCI Team



**Lance Abney**  
*TDC Facility Operations  
Manager*



**Beth Metzgar**  
*Manager of  
Accounting & Compliance*



**Kelly Bailey**  
*Project Control Analyst &  
Contract Administrator*



**Oscar Saleh**  
*IT Manager*



**Shawna Letcher**  
*Contract and Grants  
Administrator*



**Amy Merchant**  
*Meeting Planner*



**Anita Vigilante**  
*Communications  
Specialist*



**Ashly Hilton**  
*Membership  
Specialist*



**Emma Johnson**  
*Administrative  
Assistant (Part-Time)*

## PRCI Team (Cont'd)



**Cliff Johnson**  
*President*



**Mike Stackhouse**  
*Vice President, Operations*



**Zoe Shall**  
*Executive Director,  
Engagement*



**Gary Choquette**  
*Executive Director,  
Research*



**Shahani Kariyawasam**  
*Executive Director,  
Knowledge Transfer*



**Lesley Hamilton**  
*Executive Assistant &  
Office Administrator*



Pipeline Research  
Council International

**LEADING** PIPELINE RESEARCH

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# Announcements

PRCI™ OpenAccess

PRCI™ Academy

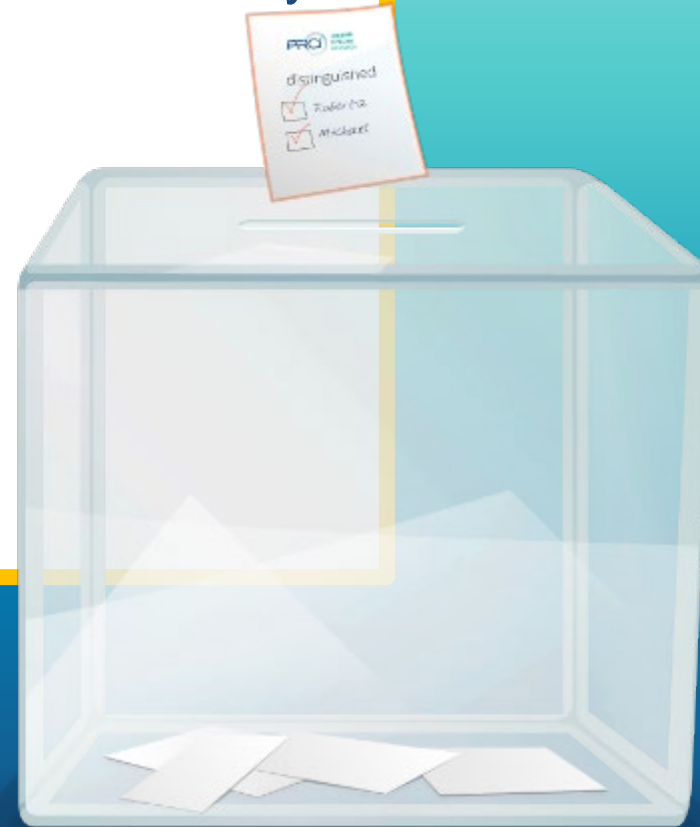
PRCI™ Connect

PRCI™ Technology  
Development  
Center

Know someone who deserves  
to be recognized for  
their contributions to PRCI and the energy pipeline industry?

*PRCI wants to know!*

**Nominations for  
Distinguished Service & Researchers  
and In-Kind Support now accepted all year**



# 2025 Photo Contest



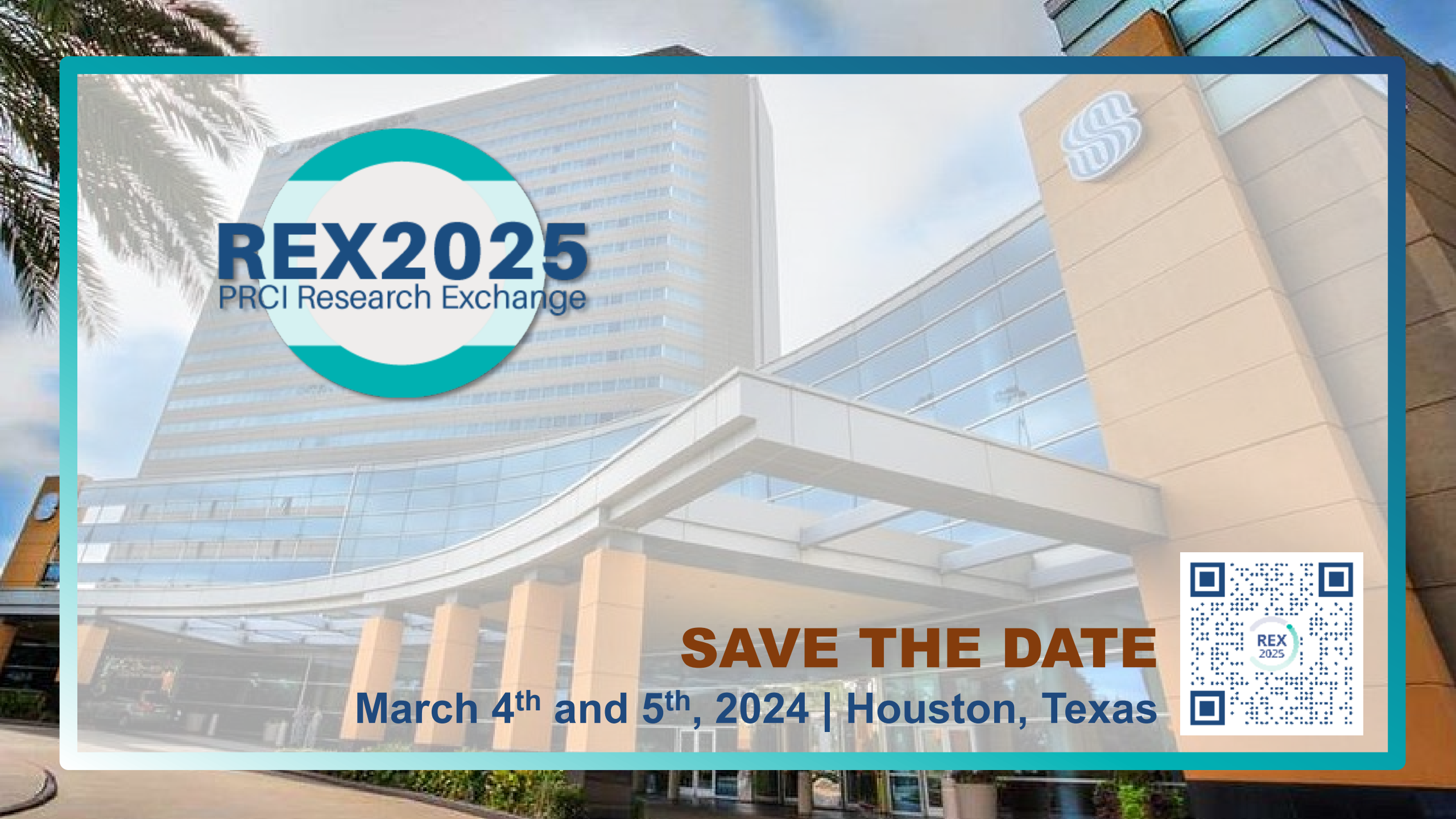
## 2024 Winner

The installation process of a gas pipeline on which fiber optic sensors have been installed for safety monitoring to measure the strain and temperature all along the pipeline in real time to monitor the pipeline's integrity and safety. Special attachment way, the red tape and black wrap, is used to ensure the fiber optic sensor is installed well. Gilroy, California. 2023.

**Tianchen Xu**

**Submit your photos to win...**





# REX2025

PRCI Research Exchange

**SAVE THE DATE**  
March 4<sup>th</sup> and 5<sup>th</sup>, 2024 | Houston, Texas



# 2025 Technical Committee and EFI Meeting Schedule

- **Winter Technical Committee, EFI Meetings**
  - March 3, 6-7, Royal Sonesta Houston, Texas
- **Spring Technical Committee Meetings**
  - May and June, Virtual
- **Fall Technical Committee, EFI Meetings**
  - October 20-24, TBA (Southeast USA)



**24th Joint Technical Meeting  
& Emerging Fuels Symposium**  
San Diego, California

**02 – 05 June 2025**  
**Loews Coronado**  
**San Diego, California**

- Call for Abstracts in Q4 2024
- Registration opens in Q1 2025

Thank you



**Mike Stackhouse**

*Interim Vice President of Operations*

[mstackhouse@prci.org](mailto:mstackhouse@prci.org)



# **RESEARCH EXECUTION**

# Technical Organization

## Technical Committees

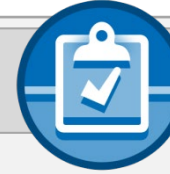
### Pipelines



Corrosion



Design,  
Materials &  
Construction



Integrity &  
Inspection



Subsea



Surveillance,  
Operations &  
Monitoring

### Facilities



Compressor &  
Pump Station



Measurement



Underground  
Storage

## Strategic Research Priorities



## PRCI OpenAccess



## Environmental Commitment

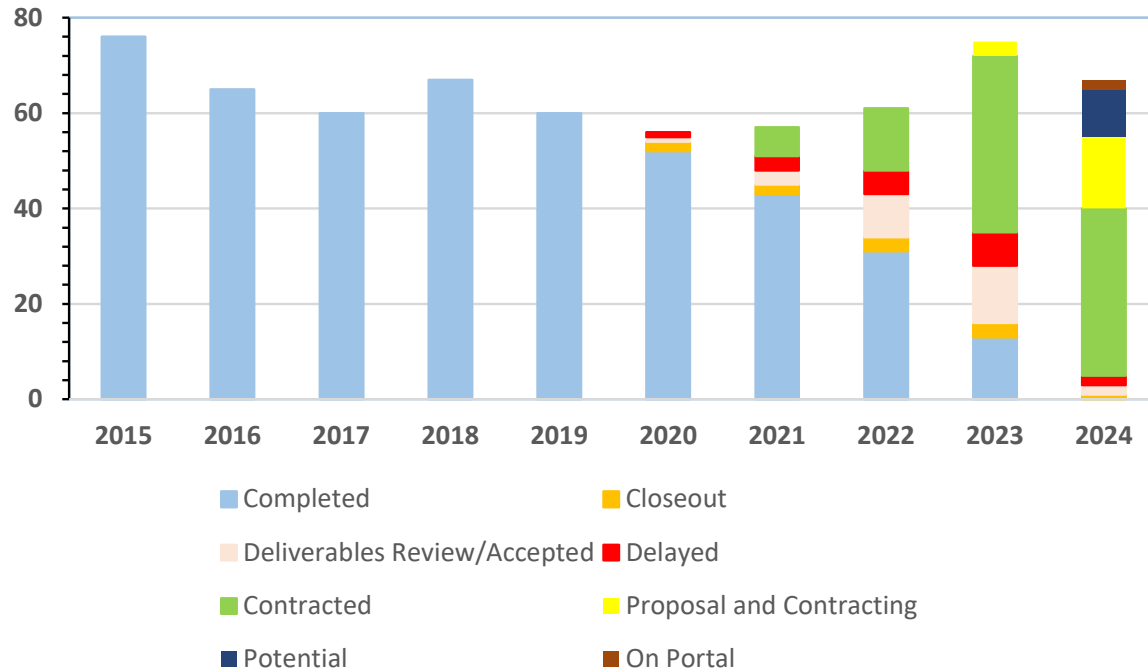


# PIRS Status

22

196, Delayed: 18

PIRS - All Committees, 10/07/2024



- 2019 complete
- \$3.975M in the Research Bank
- On demand funding helps facilitate getting new projects under contract quickly

# Committee Scorecards (as of October 7)

23

| Committee | Old Un-contracted \$ | Un-contracted Projects | Delayed Projects | Deliverables Received | Deliverable Approvals Needed | Closeouts | Roadmap Development | Overall |
|-----------|----------------------|------------------------|------------------|-----------------------|------------------------------|-----------|---------------------|---------|
| CORR      | A+                   | A                      | A                | B                     | A+                           | A         | B+                  | A       |
| CPS       | C+                   | B                      | B                | A+                    | B                            | A         | A                   | B+      |
| DMC       | A+                   | A+                     | C+               | B                     | A                            | A         | A+                  | A       |
| I&I       | A+                   | A                      | B+               | B                     | B+                           | B+        | A                   | B+      |
| MEAS      | A+                   | B+                     | C+               | A+                    | C+                           | A         | C+                  | B+      |
| SBS       | A+                   | B                      | C+               | A+                    | A+                           | C+        | C                   | B+      |
| SOM       | A+                   | B                      | A                | B                     | A+                           | A+        | A+                  | A       |
| US        | A+                   | B+                     | C+               | A+                    | A+                           | B+        | B                   | A       |
| Overall   | A+                   | B+                     | B+               | A                     | A                            | B+        | B+                  | A       |

| Committee | Projects      |          |               | Contracts |           |          |        | \$ (k)       |              | Deliveries   |                 |                  |                  |
|-----------|---------------|----------|---------------|-----------|-----------|----------|--------|--------------|--------------|--------------|-----------------|------------------|------------------|
|           | Project-Years | Projects | Average Years | Total     | Unstarted | Past end | <=2022 | Uncommitted  | Uninvoiced   | YTD Received | YTD PT Approved | Need PT Approval | Need TC Approval |
| CORR      | 29            | 15       | 1.93          | 10        | 2         | 2        | 5      | \$ 346,475   | \$ 1,035,656 | 6            | 6               | -                | 2                |
| CPS       | 24            | 17       | 1.41          | 17        | 5         | 4        | 7      | \$ 487,188   | \$ 528,059   | 12           | 11              | 1                | 2                |
| DMC       | 25            | 16       | 1.56          | 13        | -         | 3        | 3      | \$ 64,503    | \$ 1,225,508 | 5            | 6               | 1                | 1                |
| I&I       | 51            | 34       | 1.50          | 25        | 3         | 6        | 6      | \$ 1,218,203 | \$ 2,325,524 | 16           | 14              | 4                | -                |
| MEAS      | 18            | 9        | 2.00          | 9         | 2         | 3        | 3      | \$ 329,627   | \$ 531,196   | 9            | 8               | 1                | 2                |
| SBS       | 4             | 3        | 1.33          | 1         | 1         | 1        | 1      | \$ 162,140   | \$ -         | 6            | 2               | -                | 1                |
| SOM       | 19            | 14       | 1.36          | 10        | 4         | 2        | 1      | \$ 879,277   | \$ 598,046   | 4            | 2               | -                | 1                |
| US        | 7             | 4        | 1.75          | 3         | 1         | 1        | 2      | \$ 5,000     | \$ 452,696   | 2            | 2               | -                | -                |
| Overall   | 177           | 112      | 1.58          | 88        | 18        | 22       | 28     | \$ 3,492,412 | \$ 6,696,685 | 60           | 51              | 7                | 9                |

# On Demand Status

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## • On roadmap

- 37 research ideas
- 16 funded (46%)
- 14 off-ramped or deferred (38%)

## • Off roadmap

- 13 research ideas
- 1 still working to get onto the funding portal
- 5 funded
  - 2 not funded were not selected by PHMSA

| Ideas on Roadmap |                     |                     |                |           |                    |        |                     |            |       |          |                           |
|------------------|---------------------|---------------------|----------------|-----------|--------------------|--------|---------------------|------------|-------|----------|---------------------------|
| Committee        | Off-Ramped/Deferred | Alternative Funding | Pending Portal | On Portal | Pending RSC Review | Funded | Not funded, planned | Not funded | Total | % Funded | % In Process or Completed |
| CORR             | 0                   | 0                   | 1              | 0         | 0                  | 2      | 0                   | 0          | 3     | 67%      | 67%                       |
| CPS              | 4                   | 1                   | 0              | 0         | 0                  | 4      | 0                   | 1          | 10    | 50%      | 90%                       |
| DMC              | 3                   | 0                   | 0              | 0         | 0                  | 3      | 0                   | 0          | 6     | 50%      | 100%                      |
| I&I              | 5                   | 0                   | 1              | 0         | 0                  | 3      | 1                   | 1          | 11    | 27%      | 91%                       |
| MEAS             | 2                   | 0                   | 0              | 0         | 0                  | 1      | 0                   | 0          | 3     | 33%      | 100%                      |
| SBS              | 0                   | 0                   | 0              | 0         | 0                  | 2      | 0                   | 1          | 3     | 67%      | 100%                      |
| SOM              | 0                   | 0                   | 0              | 0         | 0                  | 0      | 0                   | 0          | 0     | 0%       | 100%                      |
| US               | 0                   | 0                   | 0              | 0         | 0                  | 1      | 0                   | 0          | 1     | 100%     | 100%                      |
|                  | 14                  | 1                   | 2              | 0         | 0                  | 16     | 1                   | 3          | 37    | 46%      | 95%                       |

| Ideas not on Roadmap |                     |                     |                |           |                    |        |                     |            |       |          |                           |
|----------------------|---------------------|---------------------|----------------|-----------|--------------------|--------|---------------------|------------|-------|----------|---------------------------|
| Committee            | Off-Ramped/Deferred | Alternative Funding | Pending Portal | On Portal | Pending RSC Review | Funded | Not funded, planned | Not funded | Total | % Funded | % In Process or Completed |
| CORR                 | 0                   | 0                   | 0              | 0         | 1                  | 0      | 0                   | 0          | 1     | 0%       | 0%                        |
| CPS                  | 0                   | 0                   | 0              | 0         | 0                  | 0      | 0                   | 1          | 1     | 0%       | 0%                        |
| DMC                  | 0                   | 0                   | 0              | 0         | 0                  | 0      | 0                   | 0          | 0     | 0%       | 0%                        |
| I&I                  | 0                   | 1                   | 1              | 0         | 1                  | 1      | 1                   | 1          | 6     | 33%      | 0%                        |
| MEAS                 | 0                   | 0                   | 0              | 2         | 0                  | 1      | 0                   | 0          | 3     | 33%      | 0%                        |
| SBS                  | 0                   | 0                   | 0              | 0         | 0                  | 0      | 0                   | 0          | 0     | 0%       | 0%                        |
| SOM                  | 0                   | 1                   | 0              | 0         | 0                  | 1      | 0                   | 0          | 2     | 100%     | 0%                        |
| US                   | 0                   | 0                   | 0              | 0         | 0                  | 0      | 0                   | 0          | 0     | 0%       | 0%                        |
|                      | 0                   | 2                   | 1              | 2         | 2                  | 3      | 1                   | 2          | 13    | 38%      | 92%                       |

## A friendly reminder... sharing PRCI Research

**Members must not share PRCI deliverables (e.g., reports) with non-members. In fact, sharing PRCI reports outside of PRCI:**

- Is a violation of your membership agreement
- Can dilutes the value of PRCI membership

**Applies to any project deliverable and any related papers/presentations**

- Exceptions for individuals designated as liaisons to other organizations where high-level information can be shared

**PRCI has a process for the review, approval, and if desired, sharing of deliverables with external parties**

- Sharing information before it has been approved through all steps in the process and published can negatively affect its outcome
- If or when there is a desire to share information outside of PRCI, the funding committee makes that determination and secures the approvals.
  - It is common to have restricted sharing of PRCI research with regulators, standards organizations



# **2025 SRP Budget and Funding Portal Changes**

# SRP Projected Budget

27

| SRP                                                            | Code | 2020             | 2021               | 2022               | 2023               | 2024               | 2025               | 2026               | 2027               | 2028             | 2029             | 2030             | Total               |
|----------------------------------------------------------------|------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------|------------------|------------------|---------------------|
| Optimize the Detection and Mitigation of Mechanical Damage     | MD   | \$613,733        | \$1,514,161        | \$292,346          | \$236,000          |                    |                    |                    |                    |                  |                  |                  | \$2,656,240         |
| Greenhouse Gases Emissions Reduction                           | GHG  |                  | \$908,600          | \$1,179,200        | \$1,886,300        |                    |                    |                    |                    |                  |                  |                  | \$3,974,100         |
| Pathways to Achieving Efficient and Effective Crack Management | CM   |                  | \$1,452,210        | \$1,646,500        | \$1,743,500        | \$1,259,900        | \$1,139,000        |                    |                    |                  |                  |                  | \$7,241,110         |
| Leak detection management* LD                                  |      |                  |                    |                    | \$289,100          | \$734,200          | \$1,249,100        | \$767,000          | \$424,800          |                  |                  |                  | \$3,464,200         |
| Geohazard management                                           | GHZ  |                  |                    |                    |                    | \$534,000          | \$682,600          | \$1,132,000        | \$708,000          |                  |                  |                  | \$3,056,600         |
| Leak detection management                                      | LD   |                  |                    |                    |                    |                    |                    | \$472,000          | \$424,800          |                  |                  |                  | \$896,800           |
| Risk management                                                | RM   |                  |                    |                    |                    |                    |                    | \$370,000          | \$690,000          | \$580,000        | \$850,000        | \$820,000        | \$3,310,000         |
| Mechanical Damage II                                           | MDII |                  |                    |                    |                    |                    |                    | \$550,000          | \$365,000          | \$220,000        |                  |                  | \$1,135,000         |
| <b>Totals</b>                                                  |      | <b>\$613,733</b> | <b>\$3,874,971</b> | <b>\$3,118,046</b> | <b>\$4,154,900</b> | <b>\$2,528,100</b> | <b>\$3,070,700</b> | <b>\$3,291,000</b> | <b>\$2,612,600</b> | <b>\$800,000</b> | <b>\$850,000</b> | <b>\$820,000</b> | <b>\$25,734,050</b> |
| Approximate % of RB                                            |      | 8.1%             | 51.0%              | 41.0%              | 54.7%              | 33.3%              | 39.4%              | 41.7%              | 32.7%              | 10.0%            | 10.6%            | 10.3%            | 30.0%               |

\*Proposed amounts, not approved by the Executive Assembly

# Funding changes for 2025

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- **Roadmap changes**

- Non-SRP roadmaps need more narrative on the plan and desired outcomes/objectives
- Incomplete ideas, as of 1/15/2025, identified by the TCs to be on the roadmap for 2025 will be excluded from the 2025 roadmap
  - E.g., that do not have an identified sponsor, insufficient objectives, scope
    - Will be moved to funding year 2026
  - Ideas at risk and issues to resolve will be communicated to the TCs by 12/15/2024

- **Mega ad-hoc**

- Majority of 2025 on roadmap ideas should go onto the funding portal **March 5, 2025**

- **EFI Funding**

- Currently EFI members can pay up to 50% of their EFI dues from their research bank
- Starting in 2025, EFI members can pay up to 100% of the EFI dues from their research bank
  - Subject to available funds after SRP and continuing project allocations

# Key references

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- **PRCI New Technical Committee/Project Team Member Frequently Asked Questions**
  - <https://www.prci.org/74966.aspx>
- **Roles & Responsibilities "Swim Lane" Chart**
  - <https://www.prci.org/181793.aspx>
- **How PRCI research projects are funded**
  - <https://www.prci.org/178326.aspx>
- **Key results**
  - <https://www.prci.org/KeyResults.aspx>
- **Reports**
  - [https://www.prci.org/All\\_Final\\_Reports.aspx](https://www.prci.org/All_Final_Reports.aspx)

# Project Team Review of Key Items

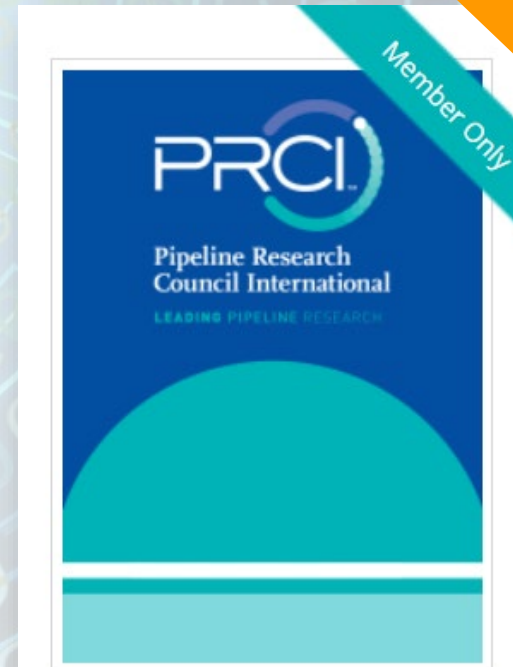
30

- **Research Proposals**
  - Individuals review and make their recommendations for contractor to select
- **Project deliverable reviews**
  - Test matrix/protocol
  - Literature review
  - Software
  - Draft final report
  - Is the content use and useful? Clear to understand/use? Free of technical errors?  
Comprehensive?
    - Issues identified should be socialized at the project team level
      - Do not contact the contractor directly, involve the project team and Program Manager to resolve issues
    - Formal acceptance logged in PRIME

# Virtual Technology Development Center (VTDC)

## Current reports include:

- [Pipe Materials Property Database](#)
- [Ultrasonic Test Results Database](#)
- [Burst Pressure Test Database](#)
- [Members' Dashboard](#)
- [Pipeline Failures Initiated by Cracks](#)
- [Pipeline Gas Hydraulic Transient Data](#)



Thank you



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