

Pipeline Research Council International, Inc.

Contractor Training

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Director of Project Execution

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LEADING PIPELINE RESEARCH

Outline

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■ General

- Who is PRCI
 - *Project execution cycle*
 - *Roles and responsibilities*
- PRCI Technical Committees
- Contractual requirements
 - *Invoicing*

■ PRIME

- PRIME maintenance
- Submitting ideas
- Submitting proposals
- Status updates
- Project Deliverables
- Closeout

■ Resources

Goals of this training

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- Improve the consistency and quality of PRCI research
- Avoid unnecessary/wasted efforts
- Help maintain research execution schedules

WHO IS PRCI?

PRCI

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- **A collaborative not-for-profit research corporation comprised of energy pipeline companies**
- **Established in 1952**
- **Mission**
 - To collaboratively deliver relevant and innovative applied research to continually improve the global energy pipeline systems



PRCI Membership

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- **32 Energy Pipeline Operating Companies**
 - 17 Natural Gas Transmission; 7 Liquid
 - 8 Liquid/Natural Gas
- **4 Pipeline Industry Organization (PIO) Members**
 - American Petroleum Institute (API)
 - Association of Oil Pipe Lines (AOPL)
 - Canadian Energy Pipeline Association (CEPA)
 - Operations Technology Development (OTD)
- **34 Associate Members & Technical Program Associate Members**
 - Australia, Canada, China, Europe, Japan, U.S.
- **Worldwide Research Organization**
 - 45 North American Companies (U.S. & Canada)
 - 25 Non-NA (Australia, Brazil, China, Europe, India & Japan)

Current Operator Membership

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■ Natural Gas

- Alliance
- ATCO
- Boardwalk
- Cadent
- Dominion
- Energy Transfer
- Gassco
- Gasunie
- GRTgaz
- National Fuel
- National Grid
- OTD
- PG&E
- SoCalGas
- Total
- TransGas
- Williams

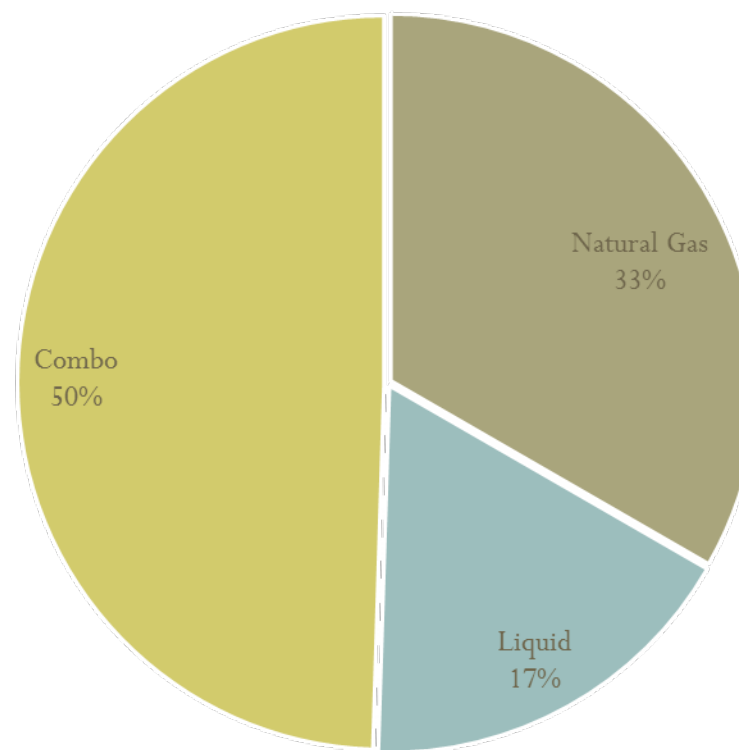
• Liquid

- API
- AOPL
- Buckeye
- Chevron
- Colonial
- ExxonMobil
- FHR
- Marathon
- Phillips 66
- Plains

• Combo

- ConocoPhillips
- Enbridge
- Enterprise
- Kinder Morgan
- Petrobras
- PetroChina
- Shell
- TransCanada

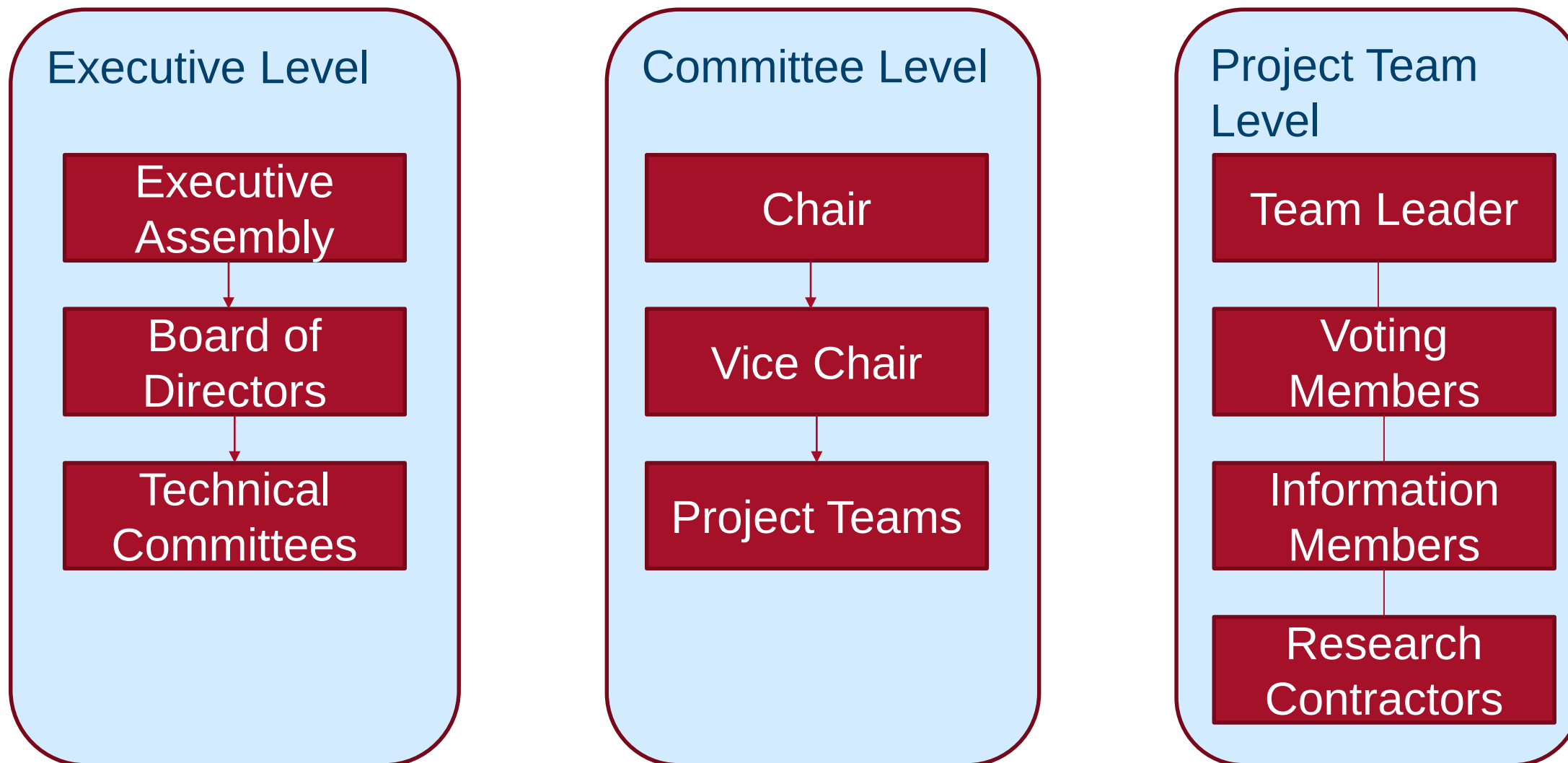
Mileage by Operations



■ Natural Gas ■ Liquid ■ Combo

PRCI Membership Organization

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Research Contractors

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- **PRCI relies on contractors to perform research projects**
 - Knowledge
 - Experience
 - Resources
 - Test facilities
 - Test equipment
 - Contacts
- **Valuable partners**
 - The brains and the legs of the nuts and the bolts

Project Execution Cycle

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- **Research idea – strategically aligned with research objectives and roadmaps**
- **Idea funding**
 - Research ballot
 - Off ballot funding (research bank)
- **Request for proposal**
- **Project team review/approval of proposal**
- **Contracting**
- **Execution**
 - Project kickoff
 - Status updates – progress, issues, schedule
 - Invoicing
 - Deliverables
- **Project team review/approval of deliverables**
- **Technical committee determination of deliverables disposition**
- **Knowledge transfer (webinar, conference presentations)**
- **Closeout**

Roles and Responsibilities of the Research Contractor

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■ Technical

- Develop research proposals
- Perform quality research
- Interact with the Project Team as needed to:
 - *Assure the scope of work is clearly defined*
 - *To address problems that arise in a timely manner*
 - *To leverage industry expertise and resources*
- Post project status updates
- Present updates to the technical committee
- Produce the project deliverables
- Support the transfer of knowledge of the project results
 - *Final presentation to the technical committee*
 - *Presentation in webinars, conferences, etc.*

Roles and Responsibilities of the Research Contractor

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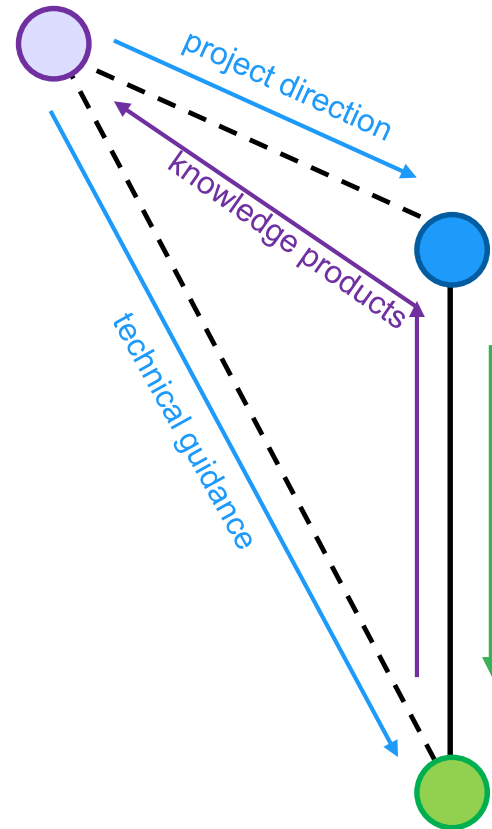
- **Project Execution**
- **Project Management**
 - Track project process, schedule, and costs
 - *Initiate remediation efforts to get the project back on track*
 - Enforce contractual terms
 - *Assure that project deliverables conform to quality requirements*
 - *Verify deliverables are delivered*
 - Provide assistance in expediting project execution as required
- **Administrative**
 - Submit research proposals to PRIME
 - Contracting
 - Track project costs
 - Status updates
 - Submit timely invoices
 - Provide peer review of the technical content in the project updates and deliverables
 - Project close out

Roles and Responsibilities of the Research Contractor

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PROJECT TEAM

- Gives project and technical direction to PRCI PM and Contractor.
 - Scope of work
 - Test plans
 - Resolution of technical questions
- Provides in-kind support
 - Samples
 - Data
- Gets knowledge products from Contractor through PRCI.
- Approves deliverables



PRCI PROGRAM MANAGER

- Releases contracts/purchase orders to Contractor
- Gets project direction from Member TL.
- Gets knowledge products from Contractor.
- Monitors Contractor's progress
- Tracks approvals
- Initiates/modifies contract
- Approves invoices for payment

CONTRACTOR

- Executes contracts/purchase orders from PRCI
- Provides updates on progress
- Gets technical guidance from Member TL
- Provides project deliverables
- Assists in knowledge transfer

Contractor Roles

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- **There are three defined contractor roles associated with each PRCI contract**
 - Principal Investigator
 - *The individual responsible for the execution of the research*
 - Contracting Representative
 - *The individual responsible for*
 - Negotiating the initial contract
 - Addressing contract modifications
 - Addressing contract closeout
 - Accounting Representative
 - *The individual responsible for submitting invoices*
- **In some cases, the same individual performs more than one role**
- **Identified at the time of proposal submittal**
- **The contractor is responsible for notifying PRCI of any changes in responsibility**

TECHNICAL COMMITTEE/CHARTERS

Technical Committee Charter Function

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- Establishes the roles and authorities of the Technical Committees, Project Teams & PRCI Staff
- Sets the ground rules for basic TC functionality
 - Who does what & when
 - How Technical Committees & Project Teams are formed
 - *TC Leadership hierarchy & terms*
 - Project Team roles vs. TC roles
 - How project deliverables are reviewed and voted on
 - How project deliverables are made available to public
 - How TC meetings are organized & run
 - *Content & Documentation*

Technical Committee Responsibilities

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■ Example responsibilities of the Technical Committee

- Respond to industry needs based on Research Objectives set by PRCI's Executive Assembly (EA) and translate those needs to project level execution plans
- Development of the annual research Ballot for review and voting by the EA
- Development of a Research Roadmaps
- Ensure that Project Teams prepare requests for proposals (RFPs) or other work descriptions and select research providers to accomplish the purpose of each Ballot approved project
- Conduct peer review of the research results and make recommendations as to if the results are to be released to the public
- Report to the Executive Assembly as requested
- Identify Project Team Leaders (TL) on newly executed projects;

TC Organization

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- **A chairman is elected from the membership**
 - Three year terms
 - No more than two consecutive terms
- **The chairman appoints one or more vice-chair**
 - Three year terms
- **Each member company gets one voting position on each technical committee**
 - Alternates may also participate
- **Majority rules for most votes**
 - Exception is approval of documents/deliverables. A reject vote has veto authority
 - A quorum of all members is required for votes
 - *Project team*
 - Exception of 'core team' review which requires a minimum of 25% participation, cannot be applied retroactive to a vote
 - *Technical committee*
 - Abstain votes count towards achieving a quorum

Project Teams

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- **Project team members**

- Funders who also commit to the support of the project have voting rights on the project team (M)
- Members interested in the project but did not help fund the project have non-voting participation (IM)
 - *Suggestions from IM may be considered by the M but not an obligation to use their input*
- Members that do not actively participate may be changed to an inactive status (IA)
 - *Can reestablish M status if they reengage in project participation*

- **Project teams are responsible for the execution of individual research projects**

- Approve the scope of work, research proposals
- Provide technical guidance to the Principal Investigator
- Provide in-kind support
- Review/approve deliverables

Project Team Leader

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- **A project team leader is appointed (TL)**
 - Usually the project sponsor, if not, the highest funder
 - Responsible for representing the project team to PRCI staff and the research contractor
 - Decides when the full project team should be involved in a project decision
 - Cannot directly change the scope of work or project direction
 - *Contract modifications through PRCI are needed to make scope, cost, schedule changes*
 - A co-leader can be used

Review of Project Deliverables

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- **The Project Team is responsible for the review/acceptance of final deliverables**
 - Reports
 - Software
 - Data
 - Spreadsheets
- **The Technical Committee is responsible for determining if the information is to be made available for public sale or retained for members only**
- **The Project Team Leader is responsible making sure a review is performed of PRCI project results being performed in non-PRCI venues**

Technical Committee Meetings

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- **Most committees hold three meetings per year**
 - Assess gaps in current approaches/technologies that require industry research and develop the associated research project to be considered for funding
 - Develop and refine Research Roadmaps,
 - Establish TC goals and priorities, and assess the TC's performance
 - Establish project team leadership and efforts to get new research projects underway
 - Review any stalled research projects to determine any actions necessary to complete/cancel the work
 - Verify that project final deliverables are being properly reviewed/approved, and develop technology transfer strategies to aid in the implementation and use of the research results
 - Review research project status updates

PRCI Staff

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■ PRCI PM performs

- Project management and facilitation roles
 - *Aids in setting up project team meetings*
 - *Tracks schedules*
 - *Reviews contractor updates to help address identified issues*
- Reviews invoices
- PRIME maintenance
- Drafts technical committee meeting agenda

■ PRCI Administrative

- Contracting and modifications
- Invoice process
- Accounting
- Contract closeout

CONTRACTUAL REQUIREMENTS

Contract Fundamentals

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■ Contract details the Responsibilities and Obligations of the parties

- Contractor proposes to conduct a specific scope of work for a cost
 - *PRCI pays for the legitimate effort to achieve the targeted research outcome*
- PRCI agree to pay for reimbursable costs up to the contract cost limit
 - *What isn't reimbursable?*
 - Travel not approved by the PRCI PM or first class air travel
 - Costs beyond the contract cost limit
 - » *Note that costs are authorized only on an annual basis – not for future ballot years*
 - Costs not billed within one year of when they became billable
 - Costs that are outside the workscope, as interpreted by the PM supported by the TL
 - Costs incurred after a check-point or a stage gate, before a “go” was authorized
 - » *Milestone go/no-go checkpoints should be stipulated in the contract*
 - Costs occurred with scope changes that were not addressed by a contract modification
 - Cost covered by PRCI to address deficiencies in deliverables to conform to specifications

Contract Fundamentals

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- **Identify responsible individuals (PM's of each side)**
- **Establish dates for deliverables**
- **Establish contract payment terms**
 - Progress payments, milestone payments
 - Holdbacks
- **Reporting obligations and report formats**
 - Monthly, Final, Final PowerPoint, Webinar
 - Notifications of delays
 - Holdback for deliverables
- **Intellectual property and data rights**
- **Confidentiality obligations**
- **Termination provisions**
- **Indemnifications & limits of liability**
- **Insurance requirements**

Invoicing Fundamentals

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- **Invoices are submitted via PRCI.org**

- Must have an account with your company on PRCI's website in order to submit an invoice
- If identified as the accounting representative on a contract, the project should appear on your dashboard
 - *Otherwise, search for the contract number*
 - *with the website, invoices can be submitted via email to accounting@prci.org*
 - *May delay payment processing, no approval notices provided*

- **All invoices must:**

- Have the PRCI contract number, may also have project numbers
- Must be broken out by milestone/task
 - *Invoiced amounts cannot exceed the available balance for a given milestone/task*
- The billing period cannot span multiple calendar years
- Many contracts do not obligate PRCI to pay for charges that are more than one year old
- Many contracts have a withholding if the final report has not been received and approved (Article 2B holdback)

Invoice Approvals

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- **All invoices must be approved by the PRCI PM assuring:**
 - The charges are reasonable for the work that has been completed
 - The work is being performed per the terms of the contract:
 - *Based on status updates provided by the Principal Investigator*
 - Deliverables are received and approved by the project team before holdback is released
 - Charges are not more than one year old
- **A review is also performed by the PRCI administrative staff**

Invoicing via PRIME

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- **Invoices submitted via PRIME have data validation checks**

- Check for valid date ranges
 - *Date ranges cannot span calendar years*
- Validate the correct contract number
- Verify available funds by milestone/task
- Fill in fields, attach invoice document
 - *Invoice must be legible*
 - *Any charges to the Article 2B holdback will be placed on hold until the project team accepts the corresponding deliverables AND any comments/issues are addressed*

- **Notices**

- The PM receives an email notice when a new invoice is posted
- The contractor receives an email notice when the invoice has been approved/rejected
 - *If a partial payment is approved, a reason for the partial payment is noted*

Intellectual Property Release

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- **All contractor presentations slated for non-PRCI venues require an IP release form**
 - Contractor completes the form – available from PRCI's website ([Research, Contractors Resources, Documents](#))
 - Submits to PRCI PM and project team leader
 - Project team has to agree with the venue/content
 - A project team member is recommended to be a co-author
- **Why is an IP release required**
 - Allows PRCI to track where/what/when information is presented
 - In some cases, requires copyright negotiation
 - Assures the content is suitable for the venue
 - Protects the contractor relative to the confidentiality clause of the contract
- **Preferred (but not always required) that the final deliverables have approved by the project team and the results have been made available for public sale**

Know the contract

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- **An invoice is received which includes charges for time and travel expenses (first class) to attend the Research Exchange and associated Technical Committee meeting. The contractor was not requested to attend this meeting.**
 - PRCI is not obligated to pay those charges.
 - PRCI should pay this invoice because the contractor provided good comments and information at the meeting.
 - The contractor should be asked to reduce the charges to coach travel.
- **Answer: Any expenditures, including time and travel, for attendance at Technical Committee Meetings, Project Team meetings, and other meetings, conferences, and seminars shall require the prior written approval of the PRCI Project Manager. Air travel will be paid at coach or economy rates.**

Know the contract

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- A contractor proposed to purchase a very expensive piece of equipment for a project. A project team member believes that there are lower cost, technically equivalent options. Is uncovered that the contractor's spouse has a financial stake in the company that supplies the equipment. This is a potential breach of contract.
 - True
 - False
- Answer: True, a conflict of interest means that a relationship exists whereby CONTRACTOR (including directors, officers, employees and subcontractors, to the extent that they will or do become involved in the performance of the work) has interests which may diminish its capacity to render fair, impartial, technically sound, objective work and deliverables.

Know the contract

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- The contractor supplies installation files for software they developed. The project team evaluates and approves the product. The PM asks for the associated source code and receives the Java code and associated make files. The final holdback for this project should be released.
 - True
 - False
- Answer: unless the research proposal explicitly specified that the software was to be written in Java (and approved by the project team and PRCI), the code should have been written in Visual Basic or C#. This would require further resolution.

Know the contract

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- As part of a project, a mass spectrometer is purchased and is charged to PRCI. One year after the completion of the project, PRCI has another use for the instrument with a different contractor. You ask the contractor to arrange to have the device shipped to the second contractor. They refuse to do so because they are using the equipment for another project and they own it. Are they entitled to keep the equipment?
 - Yes
 - No
- Answer: No, the entire right, title and interest, throughout the world, in and to any equipment or other property acquired for the Project for which the costs have been paid by PRCI and the results of the work which is the subject of this Agreement, including, without limitation, all deliverables, reports, databases and computer programs generated by CONTRACTOR ...shall vest in PRCI.

Know the contract

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- A copy of a PRCI report associated with a contractor's project is found on in a web search. The Principal Investigator would like to present the information at an upcoming conference. Because the paper is in the public domain, an IP release is not required.
 - True
 - False
- Answer: False, the IP release is always required.

PRCI WEBSITE/PRIME

PRIME

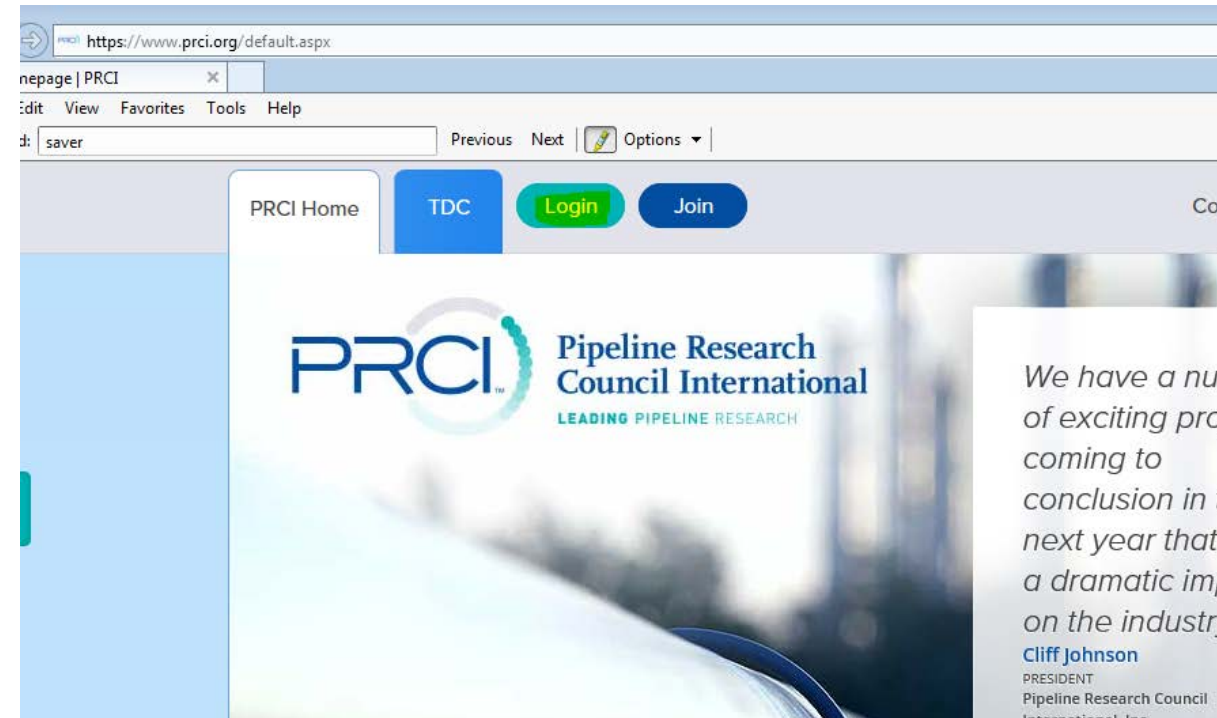
37

- **Pipeline Research Implementation Management Engine (PRIME), a database software tool used to support the operation of our research program**
 - Repository
 - *Research ideas*
 - *Resources*
 - *Project deliverables*
 - Project team/technical committee review
 - *Voting*
 - Project interface
 - *Objectives,*
 - *Roster*
 - *Contractual*
 - *Financial*
 - *Status updates*
- **An overview of how PRIME works can be found online. Details on how to navigate a project page are also available**

PRCI's Website and PRIME

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- The public website and member only sections of the website have the same url: www.prci.org
 - prci.quickbase.com no longer works
 - Must be logged in to see non-public information
 - Username is email address
 - Use 'forgot password' if logging in for the first time and don't know password
 - Recommend checking 'Keep me signed in'



PRIME Access

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- **If you don't have an account:**

- *Get someone at your company to add you to their contacts, approve your account*
- *Alternately, click the Join button*
 - *'I work for a PRCI member company or contractor and need an account to download reports and access projects.'*

- **Finding information**

- On dashboard if specifically associated with a project
- Searching by last digits of contract number or by project number

PRIME Security

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- **Must be logged in to access anything not available to the general public**
- **Security rights and access vary by user roles**
 - Contractors can see some things that members cannot
 - *Some documents and contract information*
 - Contractors are generally limited to just the projects that they are associated with
 - *Ideas submitted by the contractor*
 - *Projects that the contractor is associated with*
 - Associated contractor information
 - Technical associates are limited to just their committees
- **For PRCI members that also function as research contractors**
 - Contact your PM if you are unable to perform contractor updates
- **External search engines are allowed to index most secure information but access still requires a PRCI user account and password**

PRIME Basics

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■ PRIME basics

- Updating company information
- Adding individuals to your company
- Submitting a research proposal
 - *Milestones*
- Contract information
 - *Overview*
 - *Executed agreement*
- Project status updates
 - *Website and team meetings*
 - *Technical committee*
- Submitting invoices
- Final deliverables
 - *Recommend project team review of an outline as results are available*
 - *PRCI specification and template*
- Closeout

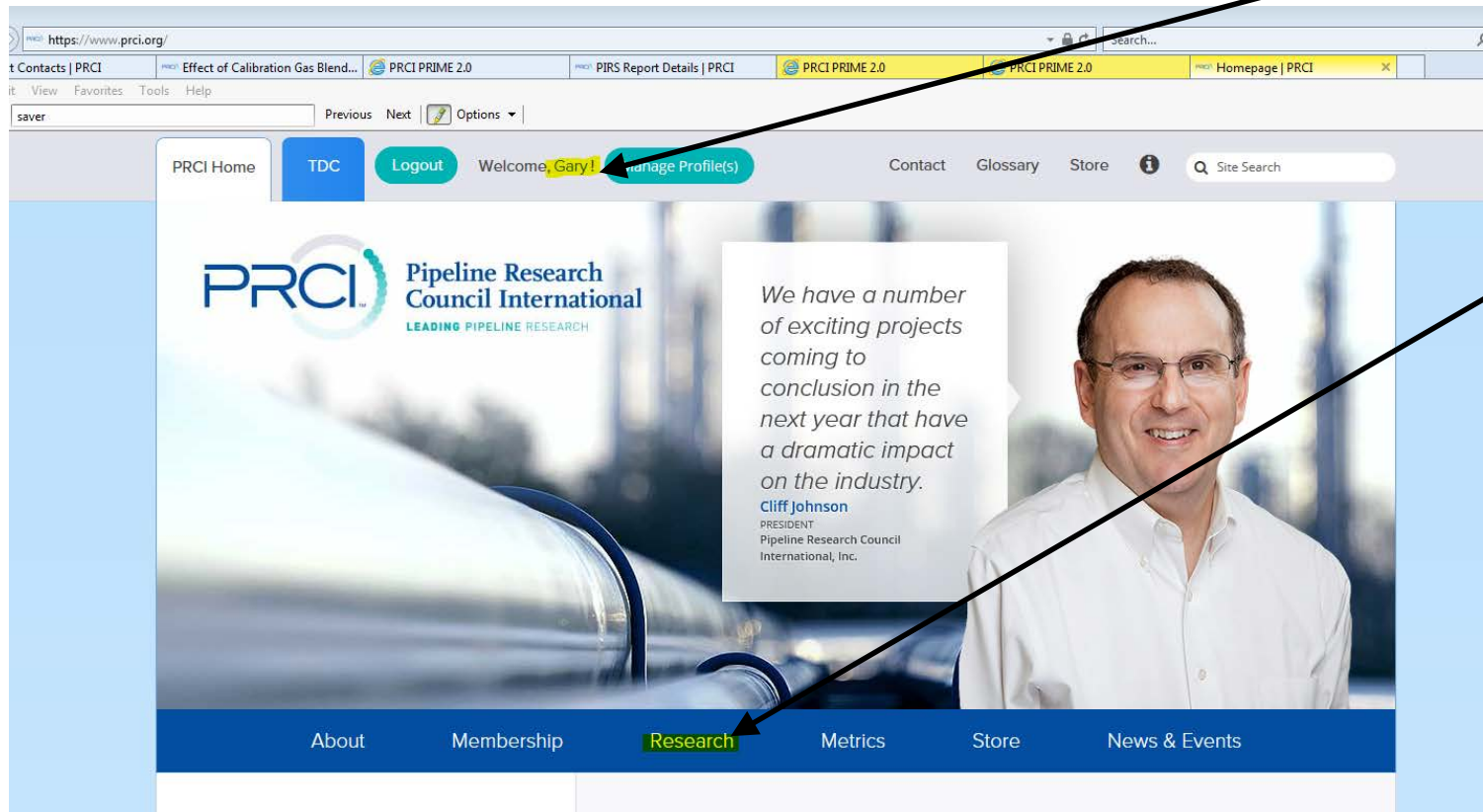
Home page

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- After login:
 - Personal dashboard or
 - Technical committee

Dashboard link

To committee



PRIME Usage

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- **Dashboard is user specific**

- Research ideas
- RFP/Proposals
- Projects

The screenshot displays the PRCI PRIME 2.0 web application interface. The browser's address bar shows the URL: `http://staging.prci.rackspace7.diamax.com/Research/PRCIDirectory/9948/9949/9954.aspx`. The application has a top navigation bar with tabs for 'Documents | PRCI', 'Compressor & Pump Station | ...', 'PRCI PRIME 2.0', and 'Adrian Huth | PRCI Profile'. Below this is a menu with 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. The main content area features a user profile for 'Adrian Huth', identified as a 'PRCI CONTRACTOR | INNOVATIVE ENVIRONMENTAL SOLUTIONS' from 'Cary, IL'. There is a 'CLICK HERE TO EDIT YOUR PROFILE' link and an 'Edit Profile' button. Below the profile are tabs for 'Profile', 'Projects' (with a count of 1), and 'Updates' (with a count of 0). The dashboard lists three sections: 'My Research Ideas', 'My RFPs', and 'My Active Projects'. The 'My Active Projects' section is expanded, showing a project titled 'CPS-11-5A' with the description 'EA MEMBER SUBMITTED: New Multi-Year Project: Ambient NO2 Modeling for 1 Hour Standard'. A green progress bar is visible below the description. At the bottom of the project entry, it says 'TECHNICAL COMMITTEE COMPRESSOR AND PUMP STATION'. A 'SHARE' button is located on the left side of the dashboard.

Research Project

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PRCI Home TDC Logout Welcome, Gary! Manage Profile(s) Contact Glossary Store Site Search

PRCI Pipeline Research Council International LEADING PIPELINE RESEARCH

About Membership Research Metrics Store News & Events

Compressor & Pump Station Corrosion Design, Materials & Construction Integrity & Inspection Measurement Surveillance, Operations & Monitoring Underground Storage

Projects Using Diagnostic Data to Estimate the Installation Uncertainty of Ultrasonic Meters

Using Diagnostic Data to Estimate the Installation Uncertainty of Ultrasonic Meters

PROJECT BALLOT CODE MEAS-6-20 BALLOT YEAR 2015

At-a-Glance

AGA-9 currently requires the additional uncertainty due to installation effects to be less than +/- 0.3%. Identification of the cause of changes in diagnostic parameter changes between calibration facility base line diagnostics and the meter first flow base line diagnostics can be used to minimize installation measurement uncertainty effects and to quickly identify if remedial action is required to address diagnostic parameter changes due to changes in operating conditions.

Overall Status

Latest Status VIEW DETAILS

BALLOT YEAR 2016

STATUS H - FINAL REPORT UNDER REVIEW

DATE LAST CHANGED 08/22/2018 10:41

Latest Project Status Update

STATUS H - FINAL REPORT UNDER REVIEW

Overall status and High level info

Project overview

Research Project (2)

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http://staging.prci.rackspace7.diamax.com/Research/CompressorPumpStation/CPSProjects/CPS-11-5A.aspx

Search...

PRCI | PRCI Compressor & Pump Station | ... PRCI PRIME 2.0 PRCI EA MEMBER SUBMITTED: ...

View Favorites Tools Help

PROJECT BALLOT CODE
CPS-11-5A

BALLOT YEAR
2019

▼ At-a-Glance

Demonstrating modeling compliance with the new 1-hour probabilistic nitrogen dioxide National Ambient Air Quality Standard (NAAQS) is technically challenging. The new 1-hour NO2 NAAQS is considerably more stringent than the longstanding annual standard and the margin for compliance is greatly reduced. With the large number of existing reciprocating prime movers, NO2 NAAQS compliance demonstrations relying on EPA's AERMOD preferred dispersion model could result in regulatory actions that force overly...

SHOW MORE

Key Contacts

View Project Team

 **Gary Choquette**
Program Manager
Pipeline Research Council
International, Inc.

Overview Contracts Discussion Documents Project Contacts Events

Scope of Work

BALLOT YEAR
2019

STATUS
B - FUNDED, NO ACTION YET

DATE LAST CHANGED
09/12/2018 12:48

Latest Project Status Update

STATUS
B - FUNDED, NO ACTION YET

AUTHOR
ADMINISTRATOR ADMINISTRATOR

DATE
09/12/2018 12:48

Project Actions

Ballot Idea

Funding

Procurement

Execution

Contracts

Documents

Project Team

Events/meetings

Project Team

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http://staging.prci.rackspace7.diamax.com/Research/CompressorPumpStation/CPSPProjects/CPS-11-5A/142219.aspx#tabs

Search...

PRCI | Compressor & Pump Station | PRCI PRIME 2.0 | Project Contacts | PRCI

View Favorites Tools Help

Overview Contracts Discussion Documents Project Contacts Events

09/12/2018 12:48

Search [Reset]

LATEST PROJECT STATUS UPDATE

STATUS: B - FUNDED, NO ACTION YET
AUTHOR: ADMINISTRATOR ADMINISTRATOR
DATE: 09/12/2018 12:48

FILTER ON TEAM ROLE

Active Contacts

OPTIONS: EXPORT ALL E-MAIL PROJECT TEAM VIEW MODE

Name	Role	Date Appointed	Organization	Job Title	Email	VCard	More
Gregg Arney	M	9/12/2018	SoCalGas		garney@sempraulities.com		+
Gary Choquette	PM	9/13/2018	PRCI	Director, Research Execution	gchoquette@prci.org		+
Brad Grieves	M	9/12/2018	Energy Transfer	Sr. Engineer	brad.grieves@energytransfer.com		+
Adrian Huth	C	12/3/2018	Innovative Environmental Solutions		adrian.z.huth@gmail.com		+
Tom Lumadue	M	9/12/2018	TransCanada	Environmental Advisor			+
Chris Nowak	M	9/12/2018	Kinder Morgan	Director	Chris_Nowak@Kindermorgan.com		+
Bill Nunn	M	9/12/2018	Boardwalk	Manager, Compression Services	bill.nunn@bwpmlp.com		+

Project Actions

- Ballot Idea
- Funding
- Procurement
- Execution
- Final Deliverable

Export to Excel

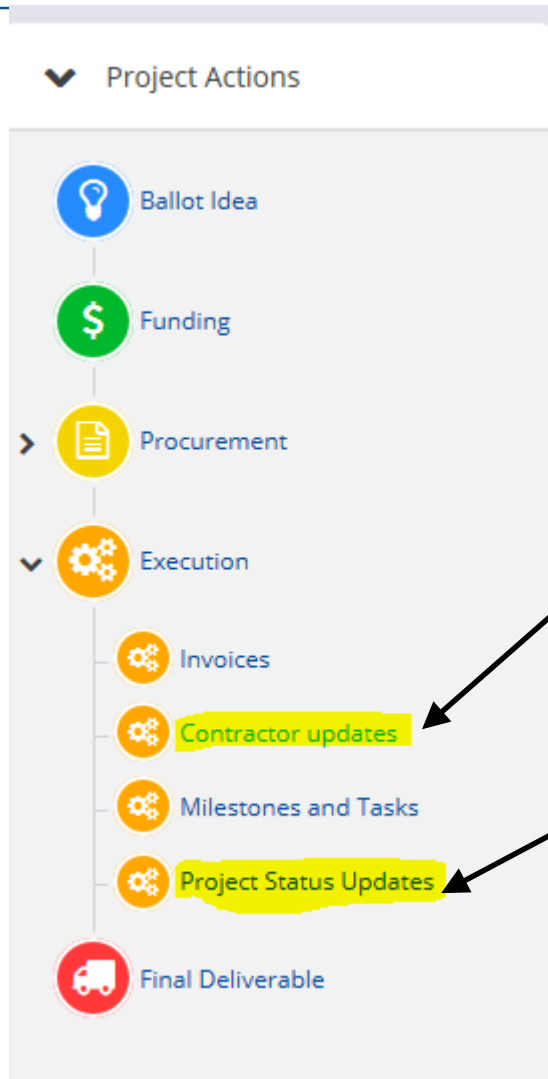
Dynamic filters

Send email to list

Add to personal contacts

Project Details

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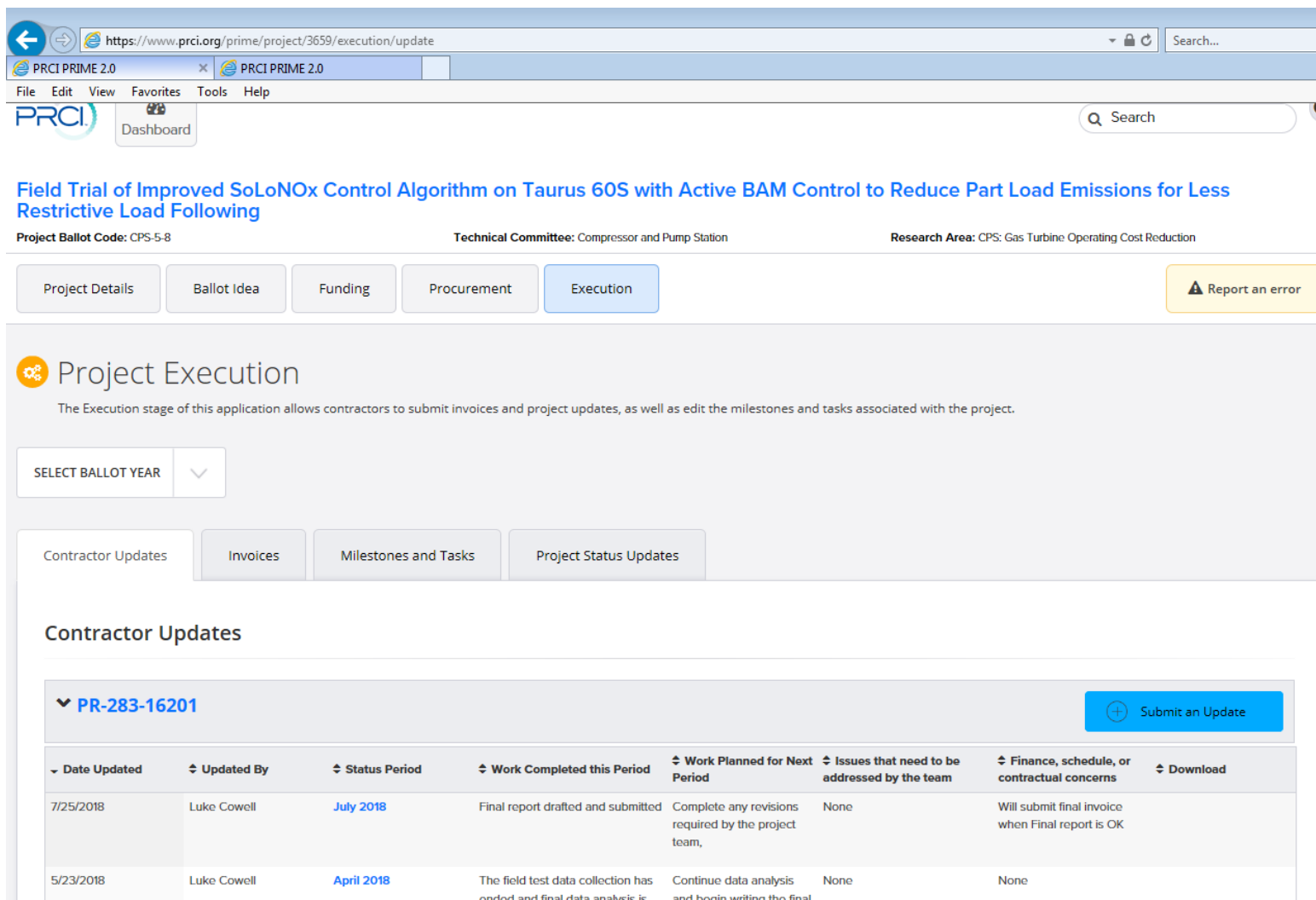
Contractor (monthly) status updates

PRCI overall status and notes

Contractor Updates

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- What got done
- What is planned for the next period
- Issues to be addressed by the team
- Finance/schedule concerns
- Attachments as needed
 - Do not attach a document having this same status information
- Post these updates even if a separate status update meeting was held
 - Invoice payments are tied to these updates
 - Allows report roll-ups
 - At-a-glance history



The screenshot shows the PRCI PRIME 2.0 web application interface. The browser address bar displays the URL: <https://www.prci.org/prime/project/3659/execution/update>. The application title is "PRCI PRIME 2.0". The navigation menu includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The main content area displays the project title: "Field Trial of Improved SoLoNOx Control Algorithm on Taurus 60S with Active BAM Control to Reduce Part Load Emissions for Less Restrictive Load Following". Below the title, the project ballot code is "CPS-5-8", the technical committee is "Compressor and Pump Station", and the research area is "CPS: Gas Turbine Operating Cost Reduction". The application has tabs for "Project Details", "Ballot Idea", "Funding", "Procurement", and "Execution". The "Execution" tab is active, showing the "Project Execution" section. Below this, there is a "SELECT BALLOT YEAR" dropdown menu. The "Contractor Updates" section is highlighted, showing a table of updates for project "PR-283-16201". The table has columns for "Date Updated", "Updated By", "Status Period", "Work Completed this Period", "Work Planned for Next Period", "Issues that need to be addressed by the team", "Finance, schedule, or contractual concerns", and "Download".

Date Updated	Updated By	Status Period	Work Completed this Period	Work Planned for Next Period	Issues that need to be addressed by the team	Finance, schedule, or contractual concerns	Download
7/25/2018	Luke Cowell	July 2018	Final report drafted and submitted	Complete any revisions required by the project team,	None	Will submit final invoice when Final report is OK	
5/23/2018	Luke Cowell	April 2018	The field test data collection has ended and final data analysis is	Continue data analysis and begin writing the final	None	None	

Submitting an Invoice via PRIME

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- Log into PRCI.ORG
- Scroll down to My Active Projects
- Navigate to the project in which you are submitting the invoice for
 - Can search for the contract number or project number
- Click View Project

The screenshot displays the 'My Active Projects' section of the PRCI PRIME interface. It features three project cards, each with a title, a progress bar, and a 'View Project' button.

Project ID	Project Title	Progress Bar	Technical Committee	Ballot Year	Key Contacts	Action
CPS-11-5	Ambient NO ₂ Modeling for 1 Hour Standard - Phase I - Project Plan, Stakeholder Coordination, and Ambient Monitoring Plan Development	Orange bar (approx. 25% full)	TECHNICAL COMMITTEE COMPRESSOR AND PUMP STATION	BALLOT YEAR 2014	KEY CONTACTS BRAD GRIEVES, CHRIS NOWAK, GREGG ARNEY, GARY CHOQUETTE, LAURA GUTHRIE	View Project
CPS-11-2	Compressor Station NO ₂ Modeling - Required Improvements and Station Impacts	Purple bar (approx. 100% full)	TECHNICAL COMMITTEE COMPRESSOR AND PUMP STATION	BALLOT YEAR 2012	KEY CONTACTS MARY BETH WHITFIELD, GARY CHOQUETTE	View Project
CPS-14B	Field Demonstration of Advanced Engine and Compressor Diagnostics for CORE	Purple bar (approx. 100% full)	TECHNICAL COMMITTEE COMPRESSOR AND PUMP STATION	BALLOT YEAR 2011	KEY CONTACTS JEFF CHINI, GARY CHOQUETTE	View Project

Submitting an Invoice

50

- Click on Invoices in the right side navigation pane listed under Execution

The screenshot displays the PRCI web application interface. On the left, the 'Key Contacts' section features a 'View Project Team' button and four contact cards: Gary Choquette (Program Manager at Pipeline Research Council International, Inc.), Brad Grieves (Project Team Leader at Energy Transfer), Chris Nowak (Project Team Leader at Kinder Morgan), and Gregg Arney (Project Team Leader at Southern California Gas Company). On the right, the 'Project Actions' navigation pane is visible, with a dropdown arrow next to 'Execution'. Under 'Execution', the 'Invoices' option is highlighted with a mouse cursor, while 'Contractor updates' and 'Ballot Idea' are also visible.

Submitting an Invoice

51

- Click Submit an Invoice next to the appropriate contract number (some projects have multiple contracts associated to them)

▼ PR-312-14203 + Submit an Invoice									
▼ Date Submitted	↕ Submitted By	↕ Contract Number	↕ Invoice Number	↕ Total Amount	↕ Status	↕ Status Notes	↕ Milestones and Tasks	↕ Download	↕ TL Description
9/5/2017	Alan Krol	PR-312-14203	#8888	-\$300.00			PRCI FUNDING, 2014 Ballot Funding \$'s - PRCI Funding (2014 Fund \$'s)	📄 ⬇️ (52 KB)	
8/20/2015		PR-312-14203	#1507-02	\$12,129.75					bill Per: 1/1 - 3/31/2015
3/25/2015		PR-312-14203	#1501-08	\$26,224.58					Bill Per: 11/1 - 12/31/2014
11/25/2014		PR-312-14203	#1411-03	\$95,032.03					Bill Per: 8/1 - 10/31/2014

Submitting an Invoice

52

- Enter the details for the invoice on the form
- Note – Start and End Date must be the same year
 - If the work extends into a new year, a separate invoice is required

Create New Invoice for [PR-312-14203](#)

Invoice Date *

m/d/yy 

Date Submitted

9/18/2017

Billing End Date *

m/d/yy 

Invoice Total *

\$ 0



Calendar Details:

◀ Sep ▶		Today		◀ 2017 ▶		
Mon	Tue	Wed	Thu	Fri	Sat	Sun
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Browse

Submitting an Invoice

53

- Enter the invoice amounts for each milestone/task
 - The system will not accept charges to a task in excess of the unpaid amount

Project Details
Ballot Idea
Funding
Procurement
Execution

Please Select Contract Milestones and Tasks

i Milestones and Tasks that have been invoiced in full cannot be invoiced further. However, you are allowed to apply a negative value to be added for discounts or credits.

PRCI FUNDING				
Milestones and tasks	Uninvoiced	Paid	Unpaid	Item Invoice Amount
☐ 2014 Ballot Funding \$'s - PRCI Funding (2014 Fund \$'s)	\$0.00	\$140,000.00	\$0.00	\$ 0
☐ PRCI Funding (Add'l 2014 \$'s) - PRCI Funding (Add'l 2014 \$'s)	\$0.00	\$100,000.00	\$0.00	\$ 0
Total				\$0.00

Submitting an Invoice

54

- Submit the invoice

Invoice Total	-\$11,000.00
Attachment	Test pdf document.pdf

SELECTED MILESTONES & TASKS	ITEM INVOICE AMOUNT
PRCI FUNDING, 2014 Ballot Funding \$'s - PRCI Funding (2014 Fund \$'s)	-\$9,000.00
PRCI FUNDING, PRCI Funding (Add'l 2014 \$'s) - PRCI Funding (Add'l 2014 \$'s)	-\$2,000.00
TOTAL	-\$11,000.00

Yes, I am finished.

Submit Invoice

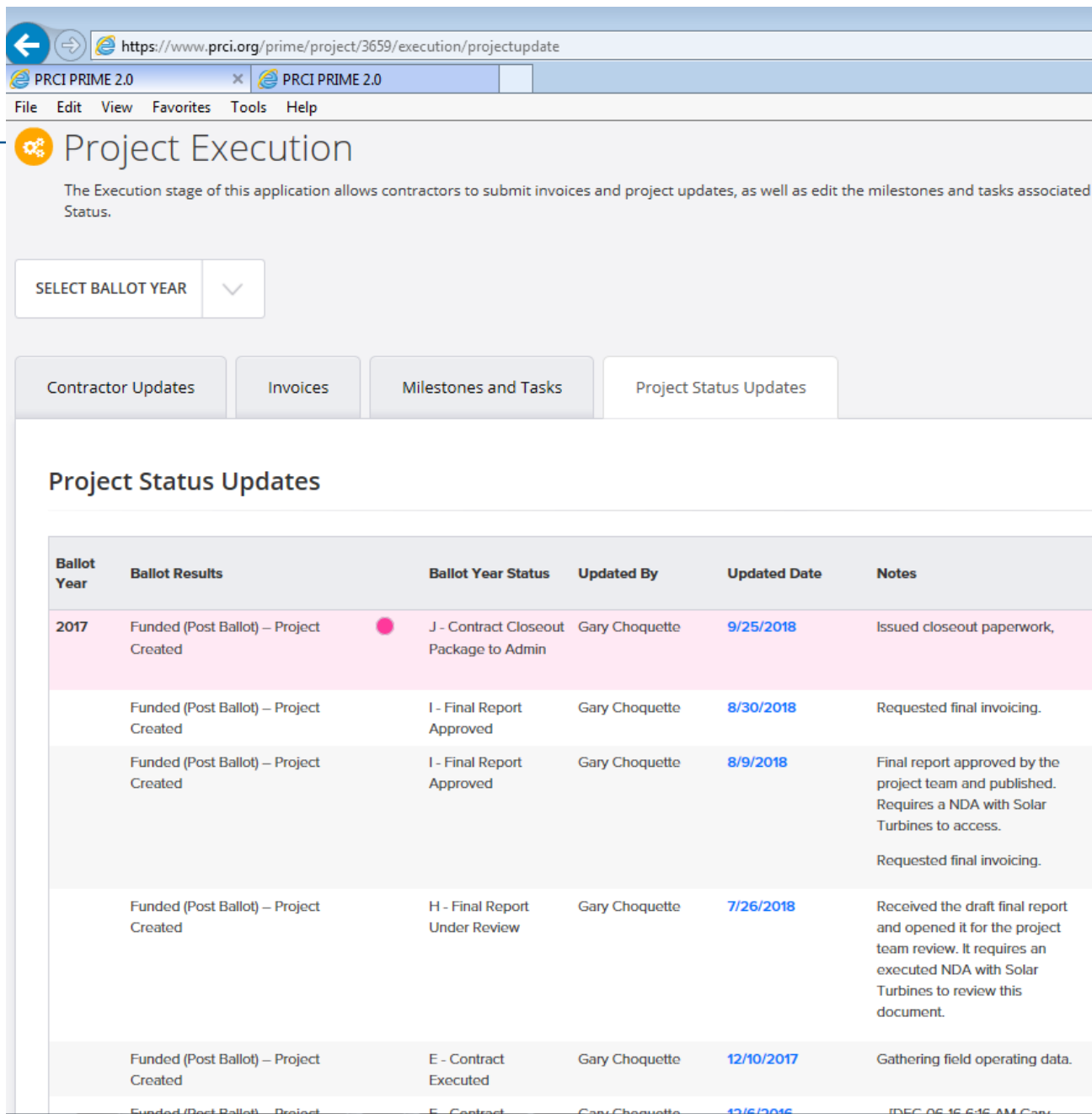
No, I have more work to do.

Continue Editing

PRCI Status

55

- PRCI PM updates this status
- Feeds into the PIRS report
- Status notes
 - Multiple updates with the same Ballot Year Status to indicate where the project is within that status
 - Provides a history of project execution



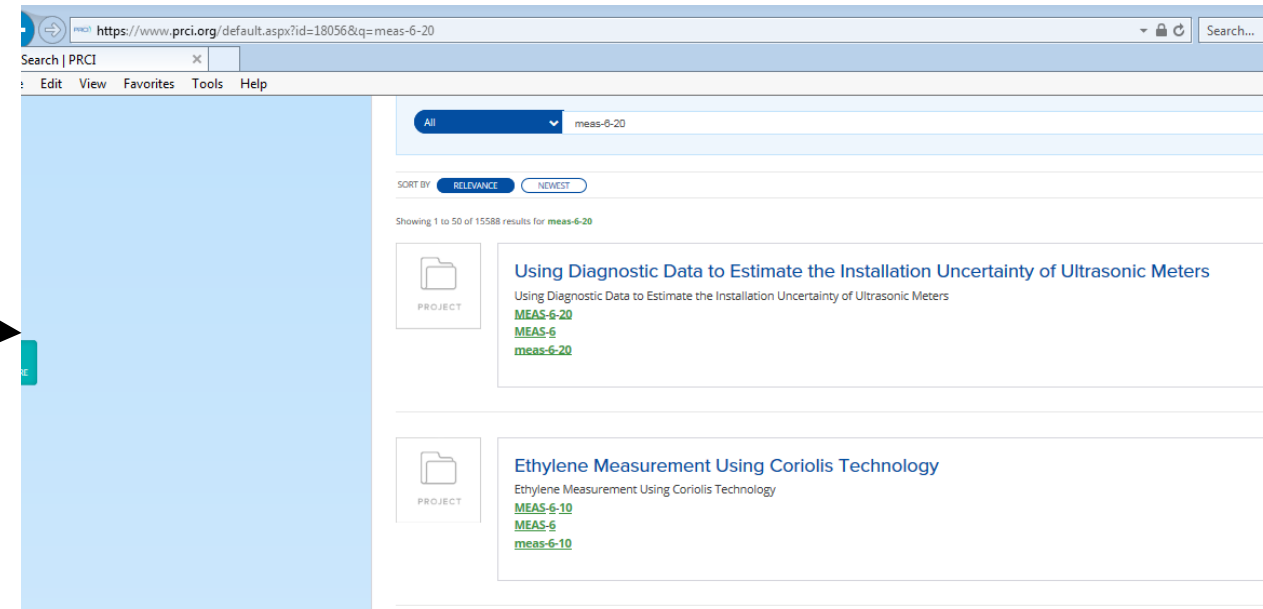
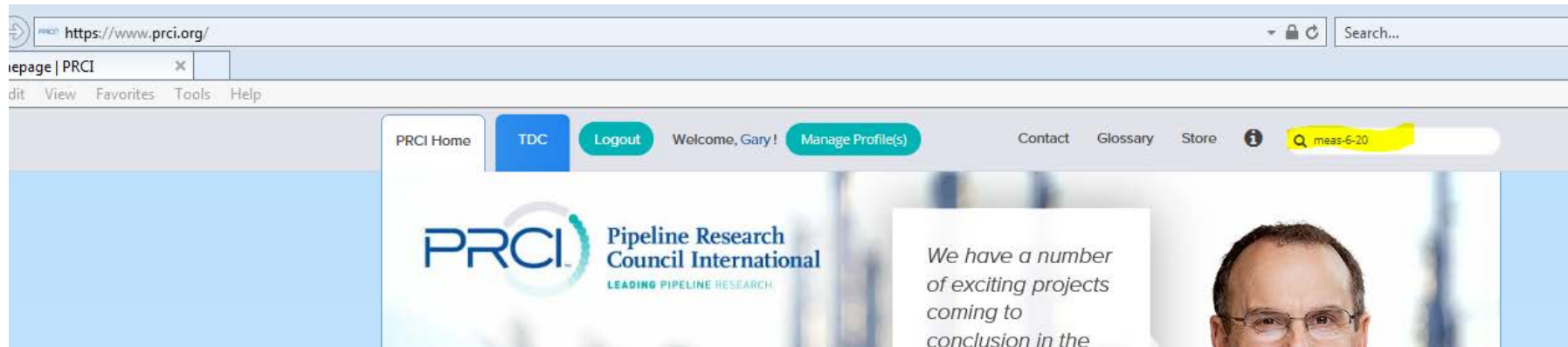
The screenshot shows the PRCI PRIME 2.0 web application interface. The browser address bar displays the URL: <https://www.prci.org/prime/project/3659/execution/projectupdate>. The page title is "Project Execution". Below the title, a description states: "The Execution stage of this application allows contractors to submit invoices and project updates, as well as edit the milestones and tasks associated Status." A "SELECT BALLOT YEAR" dropdown menu is visible. Below this, there are four tabs: "Contractor Updates", "Invoices", "Milestones and Tasks", and "Project Status Updates". The "Project Status Updates" tab is currently selected, displaying a table of project status updates.

Ballot Year	Ballot Results	Ballot Year Status	Updated By	Updated Date	Notes
2017	Funded (Post Ballot) – Project Created	J - Contract Closeout Package to Admin	Gary Choquette	9/25/2018	Issued closeout paperwork,
	Funded (Post Ballot) – Project Created	I - Final Report Approved	Gary Choquette	8/30/2018	Requested final invoicing.
	Funded (Post Ballot) – Project Created	I - Final Report Approved	Gary Choquette	8/9/2018	Final report approved by the project team and published. Requires a NDA with Solar Turbines to access. Requested final invoicing.
	Funded (Post Ballot) – Project Created	H - Final Report Under Review	Gary Choquette	7/26/2018	Received the draft final report and opened it for the project team review. It requires an executed NDA with Solar Turbines to review this document.
	Funded (Post Ballot) – Project Created	E - Contract Executed	Gary Choquette	12/10/2017	Gathering field operating data.

Shortcut - Searching

56

- Can search for project number, person, catalog number, etc.



Submit Ballot Idea

Ballot Idea Information

Ballot Idea Title*

Date Submitted*

Ballot Year*

Technical Committee*

Research Area*

Applicability of Research*

Deadline for Editing

☐ DOT Project*

Research Objective Alignment

The Executive Assembly established the following Research Objectives (ROs) as guidelines for project development. The ROs are the core research goals for PRC and are the drivers for the majority of our research portfolio. These are the items that PRC has identified as key to enhancing energy pipeline system safety, efficiency, and integrity. New projects should target one or more ROs.

Posting Documents

58

- **PRIME functions as a good central repository for project related documents. Generally it is the responsibility of the Contractor to post all project related documents to PRIME. At a minimum this includes test plans, task reports, draft final reports, and meeting presentations**
 - Project related data, spreadsheets, etc. should also be posted when the project is completed
- **Contract status updates are not posted as a document. Rather the Status reports section of the project**
- **Project final deliverables (draft final report, final report, or software deliverables)**
 - Most final deliverables require conformance to PRCI's [PRCI Final Report and Software Specifications](#)
 - A [checklist is available](#) to grade conformance to that specification
 - **Revisions should be emailed rather than posted**
 - *New posts require new voting*
 - *Coordinate with the Program Manager*
- **Some projects allow for a simplified format but must have the cover page and the disclaimer**

Posting Draft Final Reports/Software

59

- **Post draft reports in Word format**
 - Allows revision tracking/comments by the project team
 - Allows merge, accept, reject editing by the contractor
- **Project deliverables must be approved by the project team**
 - Requires a 50% quorum unless the project team decides on an alternate approach
 - Vote
 - *Approve*
 - *Approve with noted exceptions*
 - *Reject*
 - A single reject vote requires a new vote
 - *Abstain*

Deliverable Revisions

60

- **Addressing project team comments/issues**
 - If Approved, nothing further needs to be done
 - *PRCI staff will convert to a PDF and post as a final report*
 - If Approved with noted exceptions
 - *Address comments, a project team call may be required to address conflicting viewpoints*
 - *Email or dropbox a clean version in PDF format*
 - *Complete revision tracking spreadsheet (if PM approves, version compare in Word)*
 - *If PM/team agrees revisions are satisfactory, the draft will be overwritten with the final version*
 - If rejected, post a new document in Word format
 - *PRCI staff will supersede the previous version*
 - *A new round of voting will be required*

Voting on documents

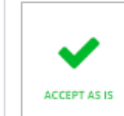
61

- Email notice with hyperlink to the document page – select votes tab
 - Project team votes to accept, accept with noted exception, or reject
 - *Can attach documents*
 - *Indicate if the document should be public or member only*
 - Technical committee votes to approve or reject motion by the project team for distribution

2018

Project team review/approval of the In-Situ Proving draft final report.

6/16



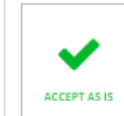
ACCEPT AS IS



Martin Schlebach

Emerson Process Mgmt.

COMPLETED FRIDAY, SEPTEMBER 28 2018 01:56 PM



ACCEPT AS IS

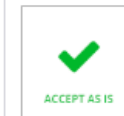


Lori Curtis

Kinder Morgan

COMPLETED WEDNESDAY, OCTOBER 10 2018 09:41 AM

Checked Member Only
too early in the process



ACCEPT AS IS



Michael Symm

SICK

COMPLETED WEDNESDAY, OCTOBER 10 2018 10:17 AM

Checked Member Only
Think there is still work to be done here before considering public.



ACCEPT WITH EXCEPTIONS



Kerry Checkwitch

Enbridge

COMPLETED THURSDAY, OCTOBER 11 2018 11:05 AM

Great report, short and to the point! Please see edits/comments in attached.

[Download](#)

SUBMITTING A RESEARCH IDEA

Submitting a Research Idea

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- **All research ideas are submitted via PRCI's website**
- **Anybody can submit a research suggestion**
 - Requires an account on PRCI's website
- **See the website for a video detailing the process**
 - <https://www.youtube.com/watch?v=ZVwdskUZZ3s&index=10&list=PLunxjZr26P5M1eqmJVOUvQCdgvBsiBbUj>
- **Not all research ideas will be funded**
 - Research ideas are weighted against research objectives and research roadmaps
 - Each technical committee ranks and prioritizes proposed research projects

Submitting a Research Idea

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The screenshot displays the PRCI website interface. At the top, the PRCI logo and tagline 'LEADING PIPELINE RESEARCH' are visible. Below this is a navigation bar with links for 'About', 'Membership', 'Research' (which is the active tab), 'Store', and 'News & Events'. On the left side, there is a 'Contacts' section featuring a profile picture of a woman and a 'Profile' button. The main content area is titled 'Research Overview' and contains a list of research categories: 'Compressor & Pump Station', 'Corrosion', 'Design, Materials & Construction', and 'Integrity & Inspection'. Each category has a corresponding icon and a link to 'All Projects', 'All Final Reports', 'All Ideas', 'All Technical Committee Members', and 'All Contracts'. A '2018 Ballot' link is also present. The 'Submit a Research Idea' link is highlighted in blue, and a mouse cursor is pointing at it. On the right side, there is an 'Edit Profile' button. At the bottom right, there are icons for a settings gear and a user profile.

PRCI Pipeline Research Council International
LEADING PIPELINE RESEARCH

About Membership **Research** Store News & Events

< Contacts

Research Overview

- Compressor & Pump Station All Projects 2018 Ballot
- Corrosion All Final Reports **Submit a Research Idea**
- Design, Materials & Construction All Ideas Research Objectives
- Integrity & Inspection All Technical Committee Members Document Repository
- All Contracts Webinars

Edit Profile

Profile

My Research

Submitting a Research Idea

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- After selecting “Submit a Research Idea” an 8 step form will open.
- This [video](#) shows the process in complete detail

 Submit Ballot Idea

Idea form tracker

1 Ballot Idea Info

2 Contact Information

3 Timeline and Funding

4 In-Kind & Member Support

5 Attach Documents

6 Summary & Submit

7 RSC Review

8 PRCI Staff Notes

▼ Ballot Idea Information

Ballot Idea title*

0 of 300

Date Submitted*

10/06/2017

X

Ballot Year*

2019

▼

Technical Committee*

▼

Research Area*

▼

Submitting a Research Idea

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■ Benefits of Proposed Research

- Indicate the anticipated economic value of project success, quantified using simple, transparent assumptions. Qualitative impacts can be cited where quantitative estimates are not practical.
 - *If the research assumptions prove to be valid, this research could reduce the ILI false positive indications without introducing false negative indications. This could reduce the need to field verify a large portion of potential anomalies saving the industry millions of dollars each year.*

■ Outcome of Proposed Research

- A short sentence that describes what new capability the operator will have at the completion of the project. The capability may either enhance current methods/ technologies or it may not currently exist.
 - *A new ILI data evaluation tool in Excel format.*

■ Research Objective & Linkage to Other Work

- One or two sentences stating the broad research goal this project is targeting and its relationship to PRCI's research programs/roadmaps. What functionality is improved or what product and/or outcome is desired?
 - *Follow-on work from IM-6-3A with the intent to improve the accuracy of interpreting ILI data*

Submitting a Research Idea

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■ Technology Transfer Opportunities

- Is it necessary to engage third parties beyond the scope of the contract, or will results be provided directly to members via reports or other means? Will the contractor be expected to play a role in disseminating/deploying the results that extends beyond the expected contract period?
 - *Pending suitable results, the results will be presented to PRCI members via a webinar and a paper at the IPC. The Excel spreadsheet can be used to post process ILI data but the potential exists for the results to be incorporated directly into ILI tools to facilitate faster interpretation of the ILI data; this should be considered when the project reaches TRL6 to see if there ILI tool vendors interested in commercially applying this technology. The results may also impact ASME standards.*

■ Specific Project Results Targeted

- i.e., Contract technical deliverables. This will be concise for a well-defined project.
 - *A Excel tool and associated document that outline how additional signal processing can enhance the interpretation of ILI data to more accurately pinpoint pipeline defects.*

■ Scope of Work

- A brief description of the proposed research activity.
 - *Member ILI data and data from corresponding validation digs will be reviewed and analyzed using machine learning tools. Additional data not used in the training of the model will be used to identify potential pipeline defects. Those results will be compared against other methods and validation dig data.*

Timeline and Funding

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- **Enter funding needs by research year**
 - PRCI research year starts October 1 of each year
 - For new projects, assume the project starts around January 1 following the research year
 - *Extra time needed to get research proposals, their approval, finalize the research contract, etc.*
 - *Match the first year cash flow needs accordingly*
 - If the project is expected to be completed after October 1 of the following year, set it up as a multi-year project
 - Include project travel, webinar (if applicable)
- **PRCI overhead is automatically added**
- **Additional funds may be added by PRCI staff**
 - TDC costs if needed for the research, may vary by project
 - SME costs, or other technical support
- **Member in-kind support**
 - Estimate based on project team calls, donation of materials, data, etc.
- **If possible, attach a draft research proposal**
- **Don't forget to click the save/submit button**

SUBMITTING A RESEARCH PROPOSAL

Submitting a Research Proposal

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- Contractors will receive an email requesting a proposal
- The email will contain the project name and a link to review the RFP in PRIME
- The email will also contain the name of the Program Manager initiating the RFP



Dear info@prci.org,

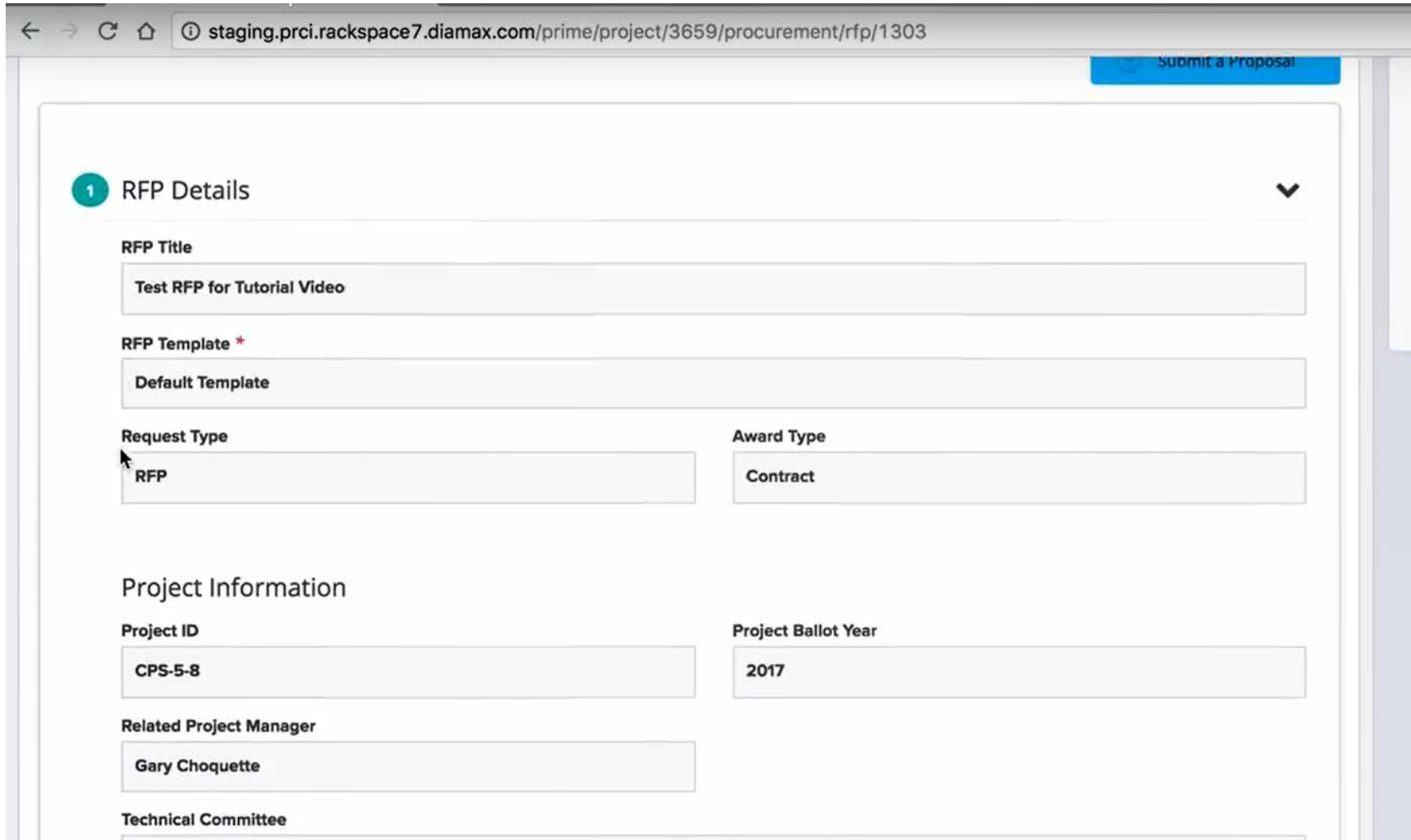
Gary Choquette sent you an RFP for CPS-7-10, Field Pump Performance Testing Procedure. Please click here [click here](#) to review the RFP before it is sent to the vendors. If you are new to the PRCI site, please [click here](#) to receive a temporary password.

Thank you,
PRCI

Submitting a Research Proposal

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- Click on the link email to review details of the RFP



The screenshot shows a web browser window with the URL `staging.prci.rackspace7.diamax.com/prime/project/3659/procurement/rfp/1303`. In the top right corner of the page, there is a blue button labeled "Submit a Proposal". The main content area is titled "1 RFP Details" with a dropdown arrow. The form contains several input fields:

- RFP Title:** Test RFP for Tutorial Video
- RFP Template *:** Default Template
- Request Type:** RFP
- Award Type:** Contract
- Project Information:**
 - Project ID:** CPS-5-8
 - Project Ballot Year:** 2017
 - Related Project Manager:** Gary Choquette
 - Technical Committee:** (field is empty)

Submitting a Research Proposal

- Review attached document by scrolling down on the RFP page in PRIME

The screenshot displays the 'PRIME' system interface, specifically the 'Procurement' tab. At the top, there are five tabs: 'Project Details', 'Ballot Idea', 'Funding', 'Procurement' (which is selected and highlighted in blue), and 'Execution'. Below the tabs, the interface is divided into several sections. The first section contains four date fields: '9/12/2017' and '9/15/2017' in the top row, and '9/16/2017' and '9/29/2017' in the bottom row. The labels 'Deadline for Questions' and 'Deadline for Proposal Submission' are positioned between the top and bottom rows. The second section is titled 'Vendor Information' and lists 'Hunter McDonnell Pipeline Services'. Below this, there is a box containing a placeholder for a profile picture, the name 'Debra Ayling', the location 'Canada', and a timestamp 'RFP Sent on: 9/12/2017 8:47 PM'. To the right of this box, the contact information is listed: 'Phone: (780) 436-4400' and 'Email: dayling@hmpsi.com'. The third section is titled '2 Attach Documents' with a downward-pointing chevron icon. Below this, a document upload area shows a file named 'TEST RFP FOR TUTORIAL VIDEO.RFP.PDF (349 KB)' with a mouse cursor hovering over it.

Submitting a Research Proposal

- After reviewing the RFP and attachments the Contractor can click on Submit a Proposal

The screenshot displays the 'View RFP' interface. At the top, there is a navigation bar with tabs for 'Project Details', 'Ballot Idea', 'Funding', 'Procurement' (which is highlighted), and 'Execution'. To the right of these tabs is a yellow button labeled 'Report an error'. Below the navigation bar, the main heading is 'View RFP', followed by a descriptive sentence: 'The Project Team can view the details and any related documents and materials from proposals submitted for this project.' In the top right corner of the main content area, there is a dark grey button with a plus icon and the text 'Submit a Proposal', with a mouse cursor hovering over it. The main content area is divided into sections. The first section is titled '1 RFP Details' with a green circle containing the number '1' and a downward arrow icon. Below this title, there are two input fields. The first is labeled 'RFP Title' and contains the text 'Test RFP for Tutorial Video'. The second is labeled 'RFP Template *' and contains the text 'Default Template'.

Submitting a Research Proposal

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- After clicking on submit a proposal, proceed with entering the information into each of the five steps.
- Attachments are entered at step 4
- The completed proposal is submitted in step 5.
- This [video walks through the step by step in detail](#).

In this step-by-step form, Contractors can fill in the necessary information to submit a proposal. In step 4, contractors can upload their proposal, presentations, or other materials. The Program Manager will be notified once the Contractor has submitted the proposal in step 5.

Proposal form tracker

1 Proposal/ Quote Details

2 Terms & Schedule

3 Milestones & Tasks

4 Attach Documents

5 Summary & Send

▼ Proposal / Quote Details

☒ Proposal ☐ Quote

Proposal/Quote Title*

▼ Related Info*

Related PRCI RFP Title *

TEST RFP FOR TUTORIAL VIDEO

Proposal Milestones/Tasks

75

- As a general rule, all tasks for the first year of effort should be listed under MS01, second year under MS02, etc.
- As many tasks as needed can be added under each milestone
- A standalone task should be listed for the project final deliverables.

CONTRACTOR STATUS UPDATES

Contractor Status Reporting

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- **The contractor is contractually responsible for posting status reports**
 - Typically monthly or quarterly with monthly preferred
- **Contractors should post their status reports using the 'Contractor Updates' link associated with each of their projects**
 - Only on active contracts
- **The contractor may upload associated documents with additional project status**
 - Project related documents (task reports, draft/final reports, data, etc.) should never be attached to a status update; instead, they should be posted under the Documents tab of the project
- **Status reports are not typically required for purchase orders**
- **There is a video that demonstrates the process for posting a status report**

Contractor Status Reporting

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- Navigate to the project page in PRIME and click on the Contractor updates link in the right hand navigation window.

The screenshot displays the PRIME project page interface. At the top, there is a navigation bar with tabs: Overview, Contracts, Discussion, Documents, Project Contacts, and Events. The 'Overview' tab is currently selected. Below the navigation bar, the main content area is titled 'Research Objective' and contains a paragraph of text. Below this, there is a section titled 'Benefits' with another paragraph of text. On the right side of the page, there is a 'Project Actions' sidebar. This sidebar contains a vertical list of icons and labels: 'Ballot Idea' (lightbulb icon), 'Funding' (dollar sign icon), 'Procurement' (document icon), 'Execution' (gear icon, which is expanded to show a sub-list), 'Invoices' (gear icon), 'Contractor updates' (gear icon, which is highlighted with a mouse cursor), 'Milestones and Tasks' (gear icon), 'Project Status Updates' (gear icon), and 'Final Deliverable' (truck icon).

Contractor Status Reporting

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- Select the applicable contract number if multiple contracts are listed
- Click on Submit an update

Contractor Updates

Invoices

Milestones and Tasks

Project Status Updates

Contractor Updates

▼ PR306-143720

Submit an Update

▼ Date Updated	↕ Updated By	↕ Status Period	↕ Work Completed this Period	↕ Work Planned for Next Period	↕ Issues that need to be addressed by the team	↕ Finance, schedule, or contractual concerns	↕ Download
9/14/2017	Carrie Greaney	July 2017	1. Here is something I completed. 2. Another item I completed	Here is an explanation of the items I plan to work on in the next period.	None at this time.	None	 (52 KB)

Contractor Status Reporting

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- Enter status into each field in the form
- Attach any additional supporting documents if needed (additional details)
- Click Submit

Add a Project Update for [PR306-143720](#)

Contract	PR306-143720
Ballot Year	2015 
Status period *	MONTHLY QUARTERLY SELECT PERIOD 
Work completed for this period*	B I S $\times_2$ $\times^2$ $\frac{1}{2}$ $\frac{1}{2}$

PROJECT DELIVERABLES

Why PRCI's specification

82

■ Reports

- The legal disclaimer protects both PRCI and the research contractor
- Common look and feel helps members navigate the content

■ Software

- Security wrapper implementation
- Maintenance
 - *Operating system upgrades*
- At the end of the project, copies of the source code should be provided to PRCI
 - *Posted for contractor and PRCI staff access*
 - *Include all make files, passwords, resource files, etc.*

Posting Deliverables

83

- **Post draft results directly to PRIME**
 - Should be in Word format
 - *Double check the document properties*
 - Title
 - Tags
- **Follow PRCI PM's instructions on posting updated versions**
 - Update the revision table on the cover page
 - Update fields
 - Final version in unlocked PDF format
 - Email/FTP/drop-box or
 - Post directly to PRIME (should only be for deliverables that were rejected)
 - Provide revision tracking – follow PM instructions
 - *Word version compare between last submitted draft and the final or*
 - *Excel spreadsheet tracking noted changes*

Best Practices

84

- If a draft final deliverable (report or software) is accepted by the project team or accepted with noted exceptions, the final deliverable would be uploaded over the draft version and the document type changed to the type 'final.' If the draft was accepted with noted exceptions, when the final version is posted a comment should be added to the resource with a Word document attached noting the revisions between the previous draft and the final version.
- If a version of a draft/final report was rejected, subsequent revisions should be posted as a separate document resource and any previous version(s) should be set to 'superseded' status. This allows the associated voting to be better tracked to specific versions of the deliverable and eliminates apparent duplicate versions of a report.

Take advantage of Word's Features

85

■ Styles

- Section headings
 - *Auto table of content generation*
 - Do not use styles for sections that do not belong in the table of contents (e.g., Abstract)
- Captions
 - *Tables above the table, centered*
 - *Figures below the figure, centered*

■ Cross References

- Auto updates of numbers as additional figures/tables are inserted
- Auto generation of list of tables/figures

■ Bibliography and associated citations

- Common formatting
- Auto citation reference updates

■ Section breaks

- Page formatting changes

Project Deliverable Approvals

86

- **Specific details of the review/approval of project deliverables are outlined in the respective committee charters.**
 - Requires two levels of approval
 - *Project team*
 - Approve (with or without comment), reject, or abstain
 - Recommends public/member only
 - Recommends a publish price for public reports
 - Full committee
 - *Confirms or rejects project team recommendations*
 - *Has the ability to modify project team recommendations*

PRCI Specifications

87

■ Why a report specification?

- Common look and feel
- Basics for newcomers
 - *Table of abbreviations*
 - *Nomenclature*
- Minimum requirements for content

■ Why a software specification?

- Maintainability
- Distribution
 - *Licensing*

Common issues with reports

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- Title too long
- Incorrect catalog/contract/project number
- Revision table not updated
- Abstract too long, gives away results
- Header/footer/document properties not updated
- Wrong font
- Missing disclaimer, incorrect copyright
- Missing or incomplete table of acronyms/abbreviations/nomenclature
- Missing section numbers
- Incorrect page numbering
- Includes foreign logos
- Missing Value to Member section
- Incompatible for black and white printing
- Authors not listed
- Draft version not supplied in Word format
- Tables submitted as pictures
- Missing project team
 - Was removed, now back in
 - Project team is PRCI project team
 - *OK to add individuals with research contractor that contributed*
- Main body too long
 - Use appendices if needed
- Confusing conclusions with recommendations
- Not supplying corresponding data
- Only capitalize proper nouns

Software – general

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- **Source code should be supplied separately from the install file**
 - PRCI and contractor access only
 - All dependencies should also be supplied
 - *Dll's*
 - *Project/make files*
- **PRCI sees more software development in the future**
 - Stay tuned

PRIME Maintenance

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- **Can edit/update your user profile**
 - Address
 - Phone number
 - Photo
- **Important to maintain your company address**
 - We still mail checks for payment
 - Should also email accounting@prci.org of address changes
- **Can add additional contacts at your company**

PROJECT CLOSEOUT

Project Closeout

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- **When the work has been completed, PRCI staff will initiate a closeout process. For contracts...**
 - At the time the closeout documents are generated, the Program Manager should also complete a [Contractor Scorecard](#). The Program Manager can request input from the Project Team Leader and/or the Project Team in completing this form. The completed form should be sent to the contractor's business and technical contacts as well as posted to PRIME. The Program Manager can also submit interim scorecards during the contract's execution if desired.
 - Contractor's will receive a closeout letter indicating that the work has been completed. It is expected that the letter will be signed and returned by the contractor if they are in agreement that the work has been completed. If the contractor disagrees that the contract can be closed, they should respond to the letter accordingly.

RESOURCES

Contractor Resources

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- **Several resources are available to help PRCI contractors do their work in conformance with PRCI contractual requirements. They can be found on the PRCI public website under the Contractors Area. Resources available include:**
 - Specifications and formatting guidelines for preparing final reports to submit to PRCI via PRIME
 - A template that can be used to draft PRCI reports to the PRCI report specification
 - A revision tracking spreadsheet should be used to efficiently allow reviews of revisions made to draft final reports. This template can be used to track those changes and should be posted to PRIME under a comment associated with the revised draft final report. Use of this tracker is required under the PRCI Final Report Specifications document listed above.
 - A checklist that can be used to evaluate a reports conformance to the PRCI Specification
 - A Status Report Template. A sample status report on the level of information desired is also available.
 - The PRCI Intellectual Property (IP) Release Form is required to release information developed as part of a PRCI project in any public forum.
 - Contractor Invoicing Guideline
 - Project Poster Templates
 - Definitions for technology readiness levels

Contractor Resources

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- <https://www.prci.org/Research/ContractorDirectory.aspx>
 - Documents
 - [*Contractors Handbook*](#)
 - [*Technology Readiness Levels*](#)
 - [*PRCI Final Report and Software Specifications*](#)
 - [*PRCI Final Report Skeleton*](#)
 - [*Revisions Tracker for PRCI Final Reports*](#)
 - [*PRCI Report Specification Conformance Checklist*](#)
 - [*PRCI Project Cost Estimating Schedule*](#)
 - [*PRCI Intellectual Property \(IP\) Release Form*](#)
 - [*Contractor Invoicing*](#)
 - Contractors
 - Contacts

Contractor Handbook

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- Roles and Responsibilities
 - Submitting Research Ideas
 - Submitting Proposals
 - Status Reports
 - Invoicing
 - PRIME
 - Contractors Area
 - Posting Documents
 - Project Deliverables
 - Project Closeout
 - Glossary
- Extras
 - Contractor Resources
 - Productivity Tips
 - Common Shortcut Keys for Windows 7/Office
 - Effective Meeting Management
 - Ethics
 - Multitasking
 - Technical writing resources
 - *Pedersen*
 - *Jarell*