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U.S. Early Plugging of Marginal Oil and Gas Wells Protocol V1.0

Workgroup Meeting #4

March 3, 2026

Housekeeping



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- Observers are in listen-only mode.



- Workgroup members should actively participate throughout the meeting



- We will follow up via email to answer any questions not addressed during the meeting.



- The slides and a recording of the presentation will be posted online on the protocol webpage.

Introduction

Reserve Staff

Rachel Mooney – Manager, Protocol Development (development lead)

Jon Remucal – Director, Protocol Development

Partial Technical Support

Partial technical support was provided by ClimateWells, in collaboration with the Rocky Mountain Institute, EcoEngineers, and Netherland, Sewell & Associates.

Workgroup Introductions

- Raise your hand on Zoom and we will call on each member in order on Zoom
- Please briefly introduce yourself, your organization, and your experience as it relates to the development of this protocol

Dan Arthur , ALL Consulting	Jay Wintergreen , First Environment, Inc.
Arjun Patney , Avondale Private Capital	John W. Brooke , Franklin Well Services, LLC
Heather Rogers , California Resources Corporation	Michael Moorhead , PermCap-GHG LLC
Puneet Chhabra , Carbon Containment Lab	Jason Seneker , Seneker & Associates, LLC
Reid Calhoun , ClimateWells	Beth Bader , SES Inc
Miguel Angel Freyermuth Corona , EcoEngineers	Issaí Medellín , TÜV SÜD America Inc.
Margaret Coleman , Environmental Defense Fund	Marc Perez , ZeroWells

Protocol Development Process & Timeline

Milestone	Date
Public Scoping Webinar	November 25, 2025
Statements of Interest Form (Workgroup)	December 1, 2025
Formation of workgroup	December 9, 2025
First workgroup meeting	January 7, 2026
Second workgroup meeting	January 15, 2026
Third workgroup meeting	February 17, 2026
Comments on Eligibility	February 27, 2026
Fourth workgroup meeting	March 3, 2026
Fifth workgroup meeting	March 11, 2026
Public comment period	TBD – April/May 2026
Protocol presented to Reserve Board for approval	TBD – June 2026

AGENDA ►

- Update from last workgroup meeting
- Discussion of key considerations for the protocol
 - Reporting timelines and requirements
 - Standardized additionality criteria
 - Performance standard test
 - Other additionality criteria
 - GHG assessment boundary
- Next steps



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UPDATE FROM LAST WORKGROUP MEETING

Update and Summary

- Reserve is drafting proposals for the following items:
 - Definition of “actively producing”
 - Evaluation for PPEF qualifications and conflict of interest
 - Continued production until well is plugged
 - P1 assessment method(s)
 - Multiple wells reporting under a single project
- Please provide written comments on the items above



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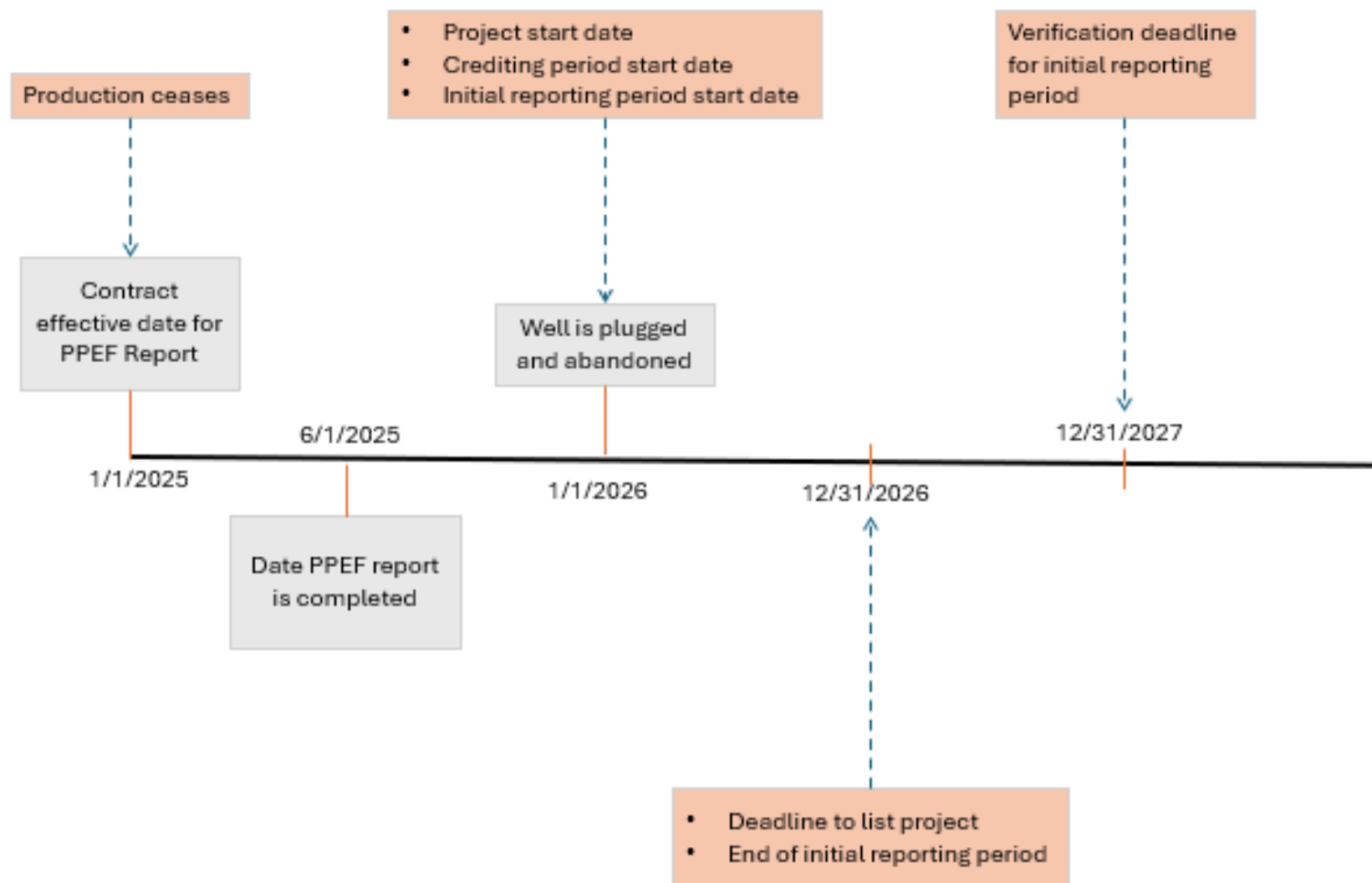
REPORTING TIMELINES AND REQUIREMENTS

Start Date and Location

General definition: earliest date on which the project activity is undertaken and emissions cease

- Option 1: Date of initial expenditure in relation to plugging the well
- Option 2: Date the well was plugged
 - Date there is no further emissions and extraction is ensured
 - Well must be plugged in accordance with the Bureau of Land Management (public lands) or applicable state regulations (private lands)
 - Should public lands be eligible or only private lands?

Reporting Timelines





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KEY CONSIDERATIONS FOR PROTOCOL DEVELOPMENT

Standardized Additionality Criteria

Standardized Additionality Criteria

- Additionality: “yields a surplus GHG reductions that are additional to what would have occurred in the absence of the carbon market”
- Reserve protocols require projects to assess additionality based on the following:
 1. Activity is above business as usual for the industry (“performance standard test”)
 2. Activity is not legally required (“legal requirements test”)
 3. No double counting of emissions (“credit stacking” and “project stacking”)
- Requires a national and state-by-state analysis of:
 - What is considered common practice/business as usual (i.e., baseline scenario)?
 - Are there any laws, regulations, or legally binding mandates that would require the project activity, either now or later?
 - What (non)carbon market incentives are available for the project activity?



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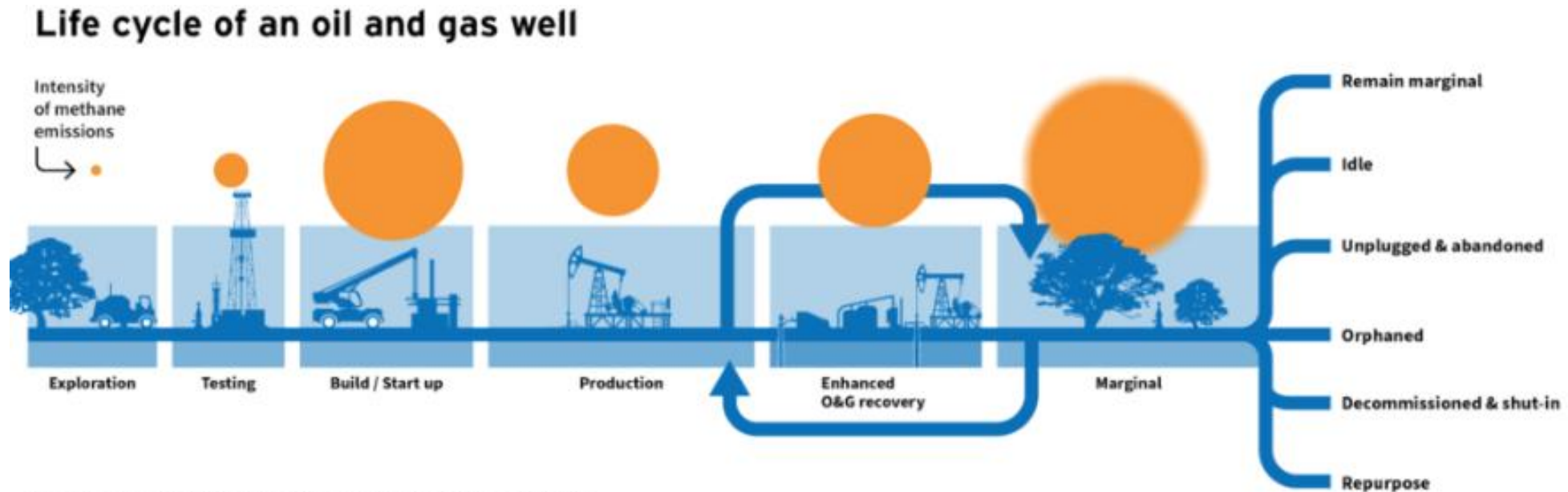
PERFORMANCE STANDARD TEST

Performance Standard Test

- **Intent:** screen out projects that would have been implemented for other reasons, including:
 - Financial
 - Economic
 - Social
 - Technological drivers
- Steps to establish the PST include:
 1. What is business as usual (i.e., common practice or baseline scenario)?
 2. What activity would be considered above business as usual (i.e., project activity) and how would the activity be defined?
 3. What are other incentives for the project activity and how can they be screened out?

Performance Standard Test: Defining the Baseline

- What is the business as usual scenario for marginal wells?
 - Continue extraction, production, and use of extracted hydrocarbons (i.e., oil/gas) until the well is no longer economically viable, at which point the well is plugged.
 - Must define “economically viable” (future slide)

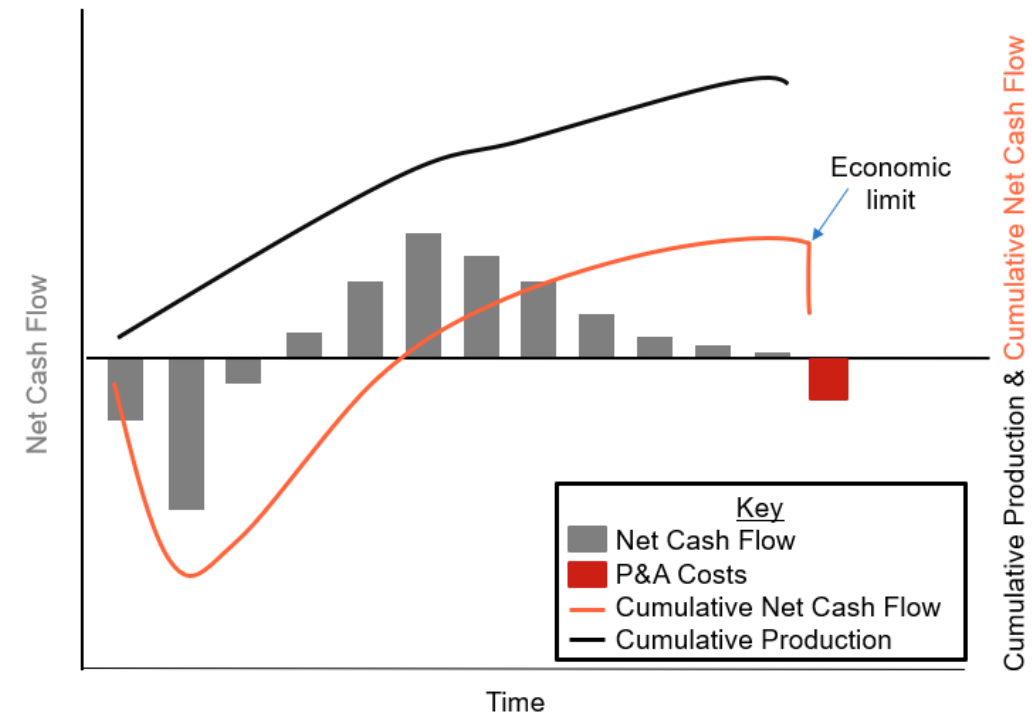


*Fuzziness in intensity of methane emissions circle represents uncertainty

Graphic Source: Rocky Mountain Institute (December 2025)

Defining Baseline: Criteria

- Project must demonstrate the **well remains economically viable as of the start date**
 - ✓Defining the economic limit (PRMS: production rate when the project reaches the maximum cumulative net cash flow)
- Net Cash-Flow Evaluation would include:
 - Expected revenue from economic reserves
 - Assuming all P1 reserves (defined by PPEF) would be extracted
 - Forecasted price of oil/gas (proposal on future slide)
 - Direct operating costs
 - Use 12 months of historical records prior to the PPEF evaluation date
 - Demonstrate that the costs are typical for the field and the average costs from the lease operating statement are representative

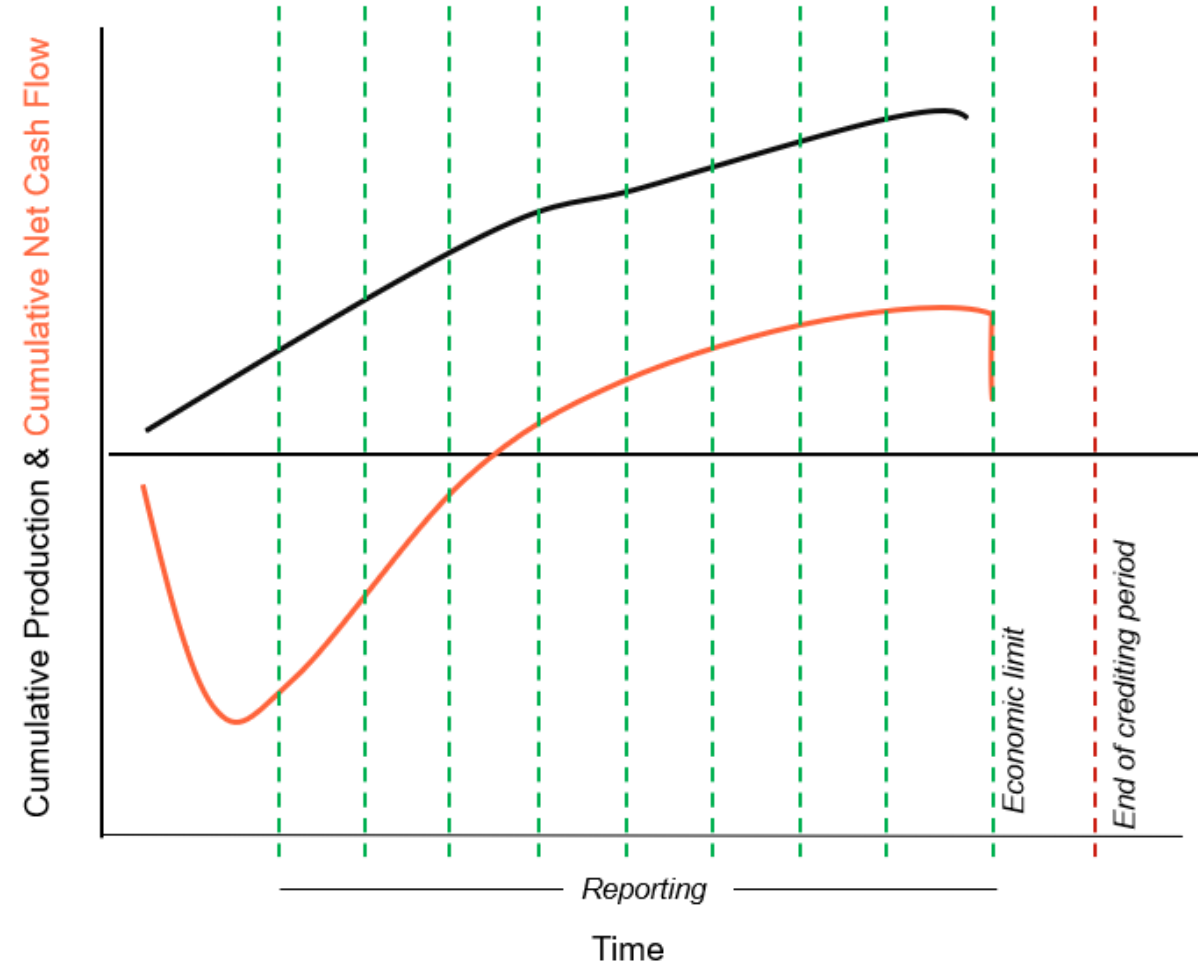


Economic Limit: Future Price of Oil/Gas

- Future price of oil/gas is subject to frequent fluctuations based on market conditions (supply/demand), geopolitics, market sentiment.
- To ensure that the forecasted revenue is conservative and the economic life is not over-estimated, how should the future price of oil be determined?
 - Option: Commodity pricing of oil from the New York Mercantile Exchange (NYMEX) West Texas Intermediate (WTI) settlement price for oil and NYMEX Henry Hub settlement price for natural gas
 - Option: Historical data
- If using commodity pricing, how should the data be applied in determining the economic life?
 - Option: Month's settlement price at the time of the evaluation date or start date
 - Doesn't capture the market fluctuations
 - Option: Multiply forecasted price by expected production on a month-by-month assessment for the futures pricing available, often forecasted 10 years (e.g., CME Group reports)
 - Use the forecasted price for Jan 2027 for Jan 2027 production, Feb 2027 prices for Feb 2027 production, etc.
- To account for market fluctuations, should the protocol require economic life to be re-evaluated? (e.g., every reporting period, every crediting period)
 - Results in uncertainty in the credit yield

Economic Limit and Crediting Periods

- Crediting period: length of time for which a project is eligible to receive credits
 - May be eligible for a second crediting period following the completion of the initial crediting period
- Because economic conditions change frequently, how many years is appropriate for a project crediting period?
 - 5 years?
 - 10 years?
- How should the economic limit date be reflected in the crediting period?
 - If less than max duration of the CP, project receives credits until economic limit date
 - Option: Crediting period renewable until project reaches economic limit date



Performance Standard Test: Defining the Project

- Performance Standard tests may include
 1. Emission rate: lower emission rates (per unit of production/service) than BAU
 2. Practice- or technology-based: specific practice/technology that is rarely or never implemented in absence of the carbon market
 3. Other qualifying conditions/criteria: incorporate or be based on other specific qualifying conditions that must be met (e.g., project site or technology characteristics)
- What would be considered above business as usual for marginal wells under the protocol?
 - Plugging the project well while it is still economically viable to continue extraction
 - Well is plugged before reaching the economic limit

State funding

- Several states ([CO](#), [NY](#), [PA](#), [UT](#)) have programs to provide funding for the early plugging of marginal wells.
 - States above define marginal wells averaging ≤ 15 BOE/day over 12 months
 - What other states have funding incentives?
- To ensure projects are implemented as a result of the carbon market, how should the protocol address the incentive from state funded programs?
 - Wells eligible to receive state grants are ineligible (e.g., in NY and 15 BOE/day or less)
 - Or simply demonstrate they were not a recipient of such programs

Other incentives

- Plugging to increase productivity at nearby wells
 - To be addressed via discount under quantification
- Others?



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OTHER ADDITIONALITY CRITERIA

Financial additionality tests are used to ensure the project activity would not have occurred without the revenue from selling carbon credits. To date, the Reserve has not used project-specific financial additionality tests; however, as an additional measure to ensure carbon markets are incentivizing the project activity, **should the protocol consider the use of a financial additionality?**

- **Is the performance standard test analysis sufficient to demonstrate the carbon market incentive?**
- **If a financial additionality test is required, should the analysis compare the estimated revenue from carbon credits to one of the following:**
 - **Option 1: cost of P&A only (using invoices)**
 - P&A is the project activity, but does this underestimate the cost?
 - **Option 2: expected revenue from economic reserves**
 - **Option 3: both P&A and expected revenue from economic reserves**

Legal Requirements Test

- All projects are subject to a legal requirements test to ensure that the GHG reductions achieved by a project would not otherwise have occurred due to federal, state, or local laws, regulations, or legally binding mandates.
 - ✓ Must include procedure in monitoring plan to demonstrate the project passes LRT
 - ✓ Sign and submit Attestation of Voluntary Implementation every verification period
- Are there any existing (or pending) laws, regulations, or legally binding mandates that would require a marginal well to be plugged prior to its economic limit?

Credit / Project Stacking

Credit stacking

When multiple types of credits are sought for a single activity at a single facility or on a single piece of land, with some temporal overlap between the different credits.

Project stacking

When multiple carbon projects have occurred or are currently occurring and there is overlap between the project activities under this protocol and those attributable to the co-located project type.

Stacking project activities with other crediting opportunities may impact additionality and create a risk of double-counting of emissions reductions.

Are there any existing crediting opportunities that could be considered project stacking?

Next Steps



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Next Steps



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- ***For workgroup members:***

- Attend fifth workgroup meeting March 11, 2026 (12am – 1:30pm PST)
- Provide written comments on today's discussion



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- ***For Reserve:***

- Develop and share documents for next workgroup meeting
- Publish recording and presentation

Contact Information

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THANK YOU!