## Question 1 Prescriptive versus Performance Based Requirements

- Clear communicative goal everyone can look at in bright light. Are we there yet? This is where we should be. Can we find agreements on what to fix when we reach the triggers? If well is unfit to drink it should be fixed with flexibility and more remediation.
- Information every month with data for hybrid/performance based solutions.
- Strive for performance based in the long run/adaptive management to reach clean up goals
- Positive results, don't add to the problem
- Prescriptive approach has utility community approach is valuable
- Performance can look prescriptive keep prescriptive elements
- Remediation needs to be done ASAP flexibility in performance based is best
- Adopt/tweak the knobs adaptive culture
- Is any part of the prescriptive invalid; what are parameters; how much is prescriptive mandated; how much is flexible?
- Is prescriptive the public side?
- Water Board wants the steering wheel; the risk of prescriptive is if performance standards are not being met then there will be trouble down the line
- May want prescriptive tools to use to fix that's the danger for Water Board
- Adjust prescriptive tools hybrid
- There needs to be a steering wheel somewhere; more performance
- Fairly readable remedies
- Visible and transparent
- General agreement hybrid is appropriate
- Hybrid allows flexibility; with constant fact changes use "adaptive management"
- Hybrid avoids unintended consequences
- Prescriptive is defining parameters in the beginning, once new data is collected use data for performance base to optimize remedy
- It is good to have a hybrid because for the past 20 years it was performance based and that didn't work very well
- Agreement with above two comments and wants to move forward quickly to improve Hinkley...if there is any remediation to improve Hinkley move fast
- Agrees with above three statements
- Have only 1 CAO and rescind all others
- Need for flexibility to perform remediation as efficiently as possible and minimize consequences

- MRP being able to use adaptive management to tweak final remedy
- Protect water quality and also so that we aren't back here is 20 years
- Make sure time is being well used and not creating more problems and remedy issues...efficiency and effectiveness
- Protect well users and stop plume migration
- Having just 1 CAO is important
- Reaching out to educate the community and see Hinkley improve
- CAO should include outreach. Residents aren't always comfortable coming to meetings. They want neutral dissemination of the facts.
- Agrees with above statement
- Something needs to be done to combat the negative stigma associated with Hinkley
- Agrees with above statement
- Education in public meetings is failing...more personal outreach is needed in a nonthreatening setting
- CAO needs flexibility with receipt of new data
- Connect the wells so we can see where it is going point to point otherwise no facts to put it there
- General prescriptive requirements in Order, like what Project Navigator presented in the decision tree, as new facts come in, allow to transition
- Project Navigator gave examples for what type of requirement should be for each – combo of each. Favoring performance over long-term for adaptive management
- Favor of performance do best job quickly allows those goals to be done.
- Operational prescriptive requirements could have unintended consequences.
- Liked what Project Navigator did
- IRP does a good job, but need points where to connect stuff. On deep wells
  there weren't samples taken. Need to be able to say it's here or there can't see
  rocks, etc. underground and need to be able to put where Cr is, need samples,
  and water is fluid. Need to be able to say it is here or not here, and if it is
  working, we need to be able to go back and make sure that it is not moving. No
  one can see what is going on underground.
- Talking with community and concerns about process taking a long time for remediation. The community is ready to get things done and rely on PG&E to get it done and leave PG&E to get it done in most effective way to moving forward. Don't want to have to go to the Water Board to ask permission when things break down. Community wants things to go quickly.
- Agrees with a lot of what we have heard already. Older Orders were more open and helpful to have general goal, but we need lines to hold PG&E accountable. Open to debate if PG&E is doing the best job they can. The Water Board may not agree that they are doing their best. If we only rely on performance, then we

are not in good position to hold them accountable. We have lots of info and it is easier to understand what is different and measure progress. Where it is reasonable to measure, it is good to do so.

- Sliding scale in IRP recommendation more performance based to get results timely manner.
- 2 issues how draw plume, how operate remedy. How draw plume issue when we have performance based bringing more info than just concentration from wells, also water flow provides better answer. For operational – the proof is in the pudding – if meeting containment levels, than we are doing good.
- Believe IRP has done good job and will agree.
- On prescriptive it is most important to draw plume boundary the way we have for years so that it is consistent over time and sends a consistent message.
   Important to use prescriptive for sampling frequency and location. Performance is OK for addressing increasing plume in north and west where they already have remediation plans in place.
- See IRP handout
- Operational flexibility is most important so asking permission for making changes is not good need more flexibility.
- Some ideas in submittal by Prosecution Team response regarding sampling are OK and are OK for looking at some details
- A bit of consensus around containment, cleanup goals
- Hybrid is good some prescriptive and performance, and Robert broke them down pretty well.

# Question 2 Northern and Western Areas and USGS Background Study

- North low Cr levels; continue to watch/monitor but no need to clean to 3.1 ppb; keep sampling domestic wells + monitoring house wells to keep level
- Cr in north not associated w/plume; looked at geologic samples sent; talks about data will learn a lot in the next 5 months; water in the north looks different than water in the south
- In the interim if levels are over 10 ppb it will be remedied
- Protection of human health and environment must be met. MRP modification plan applied 1) use criteria and tools in MRP...debate in north and west
- MNA adaptive management information can be peeled off background study, mined info can then be applied to north plume
- Any information accumulated will be useful if we have reliable information from the past, it will be useful
- As stated in responses, reasonable evidence from Cr in north is attributed to PG&E compressor station. I feel like we should continue to monitor domestic wells, it is important, what is required is not onerous or burdensome. Regarding the background study, CAO could do better job of acknowledging uncertainty around background value
- Question: Understanding by community on how MCLs are set Response: Commonly understood criterions; economic feasible grates on community; 10 ppb is target, it's the law. Trouble in the past as to why this number is so high; it's OK for OEHHA to set lower number but folks didn't buy it
- North domestic wells aren't above 5 ppb. We want to continue to monitor to capture data for core plume
- North is safe 3.1 background study interim while USGS established background for core + areas around if there are flows 3.1 is not the plume groundwater not moving consistently
- Geological chemistry is different in the north vs. core plume. USGS is expanding causes. It is an alarm to call 3.1 a plume
- Interim results from USGS should be included in MRP
- North area is the crux issue of the CAO
- Agree, monitoring for the north needs to happen until study is complete
- Meet MCL and monitor when there is variation
- Ongoing monitoring and protection of domestic wells

- Significant uncertainty in current background level USGS is in the process of establishing a new background number – currently domestic wells are below 5ppb and protected
- continue monitoring to protect human health
- CAO as proposed...achieve cleanup numbers by the dates laid out in CAO
- Agrees with above
- Identify lands that are not effected by chromium or the plume publically
- Continue monitoring-contact users of wells and see how they would feel about being taken off of the program-opens up areas for residential and agricultural growth note: just in affected areas
- Official determination on weather land is contaminated so that it can officially be listed as uncontaminated
- Next three agreed with above statement
- recognize that a new background number is being made by the USGS and no remediation is required as long as domestic users are being protected
- wait for USGS to give final background and in the interim get preliminary data and use it to further asses in the north and south
- remediated hot spots above 10 ppb because it has shown to be achievable
- In the north there are 3 hot spots PG&E has already performed the work that is expected. PG&E pumped and numbers are back down. Two other wells are elevated. Order just asks for a plan – more open ended – what does PG&E think should be done.
- IRP manager suggests that the MRP should be like key issue #5. Relevant interim results of background study incorporated. MNA philosophy for data review. Appropriate monitoring west of Lockhart Fault. Use adaptive management as data comes in.
- Containment work of plume core important for northern area. Currently all domestic wells in north are all low so continue monitoring to make sure below MCL.
- Agree with above.
- Agree with IRP.
- The background study is a 4 year process, so if there is interim information it should be used if there is a degree of certainty not 50/50. Adapt as we receive new data. In the north, continue to monitor, but not necessarily remediate there are no domestic wells. Natural attenuation eventual
- Along same lines monitor to make sure domestic wells are OK. Not the right time to do remediation when we are not sure of source. USGS needs to answer that first. They addressed a well that was tampered with – just trying to deal with tampered with – but not remediation.
- Agree with IRP and PGE
- Until USGS study is done, no one has any real answers, address as data comes in. This is not the final Order, when the study is done there may be a final cleanup Order. The background study is most important and people can react to it – whether more remediation or not. As USGS discovers stuff, we need

flexibility to go in and do stuff – we need to be able to manage as information comes in and it is something that can be addressed.

- All information would come in through the Technical working group and the Water Board would amend the Order?
- Bottom line want flexibility rarely is final order. Even if we set a line/goal what we find is when we get closer to that goal, we may be doing better job than we thought, or if certain places are not reaching goal, decide when enough is enough. This is where we get uncomfortable deciding when we are done because it is too far off in future. Need more than monitoring we need a combination of monitoring and taking action. We are taking action in north and west and the numbers are going down. When the next piece of information comes in that needs response we want PG&E to take action. We want more than to wait and see while the study is going on
- Requirement to remediate north is the most important design from place of knowledge – background or not. In addition to hot spots, around domestic wells too – not enough information to understand nature and evaluate options. Time is too short.
- Because we live in the north it is the most important, but don't know if Cr is natural or contamination. If hot spots develop, need PG&E to act, otherwise it is OK to wait.
- All agree that remediation is working and it is tough to put timeline when it will be all done because there is no study yet to say what the background is— so it is hard to do a timeline. Need some kind of timeline for 3.1 and need a certain amount of time that is technically doable.
- Reached consensus that there is no answer yet and difficult to have consensus until we complete the background study – and then we will have more information regarding timeline and what to do
- Look at making adjustments to northern area because work done and look at timelines/small actions without a lot of design requirements.
- Keep hydraulic control and MNA
- Work with information from the background study as it becomes available.
- Summary key points ideas for consensus for north and western during USGS Study – 5 years with deliverables. As that information and other information comes in, Water Board should use that info to make adjustments in the Order. Not sure if consensus on it, but may have been... seemed like hearing leaning toward adaptive in north and monitoring it and some adjustments and not just remediate right away.
- Length of time and planning/design wasn't what was we were looking for but maybe opportunities for specific actions in hot spots. Targeted pumping/removal/treatment – not in entire north.

# Question 3 Specific Deadlines versus Remediation Goals with Adaptive Management

- Want remediation goals with adaptive management
- In CAO we want better clarification that if we are not reaching a goal is not a violation (is performance goal)
- Important for community to focus on positive results
- One well was over level and cost a lot (\$3.6 million) with proof someone else did it
- Say 90% to goal rather than 10% away (negative requiring violation notice)
- Focus on positive so community efforts for rebranding are more attainable
- Corrective action plan prior to violation, there should be recognition that opportunity to correct course by using CAP before jumping to NOV
- Use mathematical models as tools to analyze/interpret/understand and make necessary corrections
- Preference for performance base adaptive management-end goal is appropriate
- Adaptive management this is not a textbook plume
- Overly stringent "proposed" CAO is based on model that has significant uncertainty and therefore choosing stringent a timeline is unreasonable
- Agrees with above
- Adaptive management-model results change depending on field conditions
- Specific remediation deadlines
- Yes should establish goals with adaptive management need flexibility
- Agree that we need flexibility can't set deadline to deal with hotspots
- Specific deadlines rely on PG&E information to set remediation deadlines.
   Would like to have specific deadline to have water below certain requirements.
   Believe we have set a reasonable approach not all wells.
- IRP in favor of adaptive management changing data. 3/13/15 info sent. If boundaries change, would need change.
- Adaptive management and goals things can change by the time get there.
   Work toward goal and look at progress and make changes if not making progress. It is the standard process that EPA uses to manage.
- Community would like a timeline set to achieve goals but if don't make it, can adjust. Community wants to see end time.
- Community wants to see progress

- Can have adaptive management and set requirements can have both together. Tahoe is example.
- Agree with community wants to see progress
- Examine deadlines in there now there is a range of potential time periods, but Order puts in most optimistic.
- Not huge difference everyone likes adaptive management, but Prosecution Team likes specific deadlines, but can look at those again.
- Have to have adaptive management because there is no crystal ball, and there may be road blocks along the way. Need goals, but may change over time.
- What would it look like to have deadline set but to confirm performance of adaptive management?
- Order might not be in place for more than 4 years PG&E is required to provide a report in 4 years (a big report) to look at how they are doing. If they show a need for more time, they could revise the Order at the 4 year mark or 8 year mark.
- Deadline could be set 50% removal by such date... but then if it is not met no enforcement, but adaptive management process tied in and put into the CAO.
- Useful to have a technical/walk through if goal is 50% would a be model be run or ??? Not so much legal, but technical approach.
- Notion being like stormwater build control and if we do what we said we would do, and water quality is still a problem, no enforcement action will be taken because everyone agreed on the plan. Feel like we have a good plan – but if we don't get to where we need to be than we look at what happened. Would depend on whether tried or had budget cut. "Design storm idea"
- Restatement idea to reach consensus if there was a deadline and if it is not met, what would it be tied to... it could be investigation or modeling or some other steps taken in lieu of enforcement.
- When Kevin gave his presentation, consensus was to give a goal and run a model and keep adding data and community agreed.
- Not new idea how does is get implemented and what is the language so all understand
- Agree with Lauri

### Question 4 Replacement Water Requirements

- The south is not up for discussion
- North doesn't need a buffer zone
- CAO is ambiguous, current language would be ambiguous
- "affected area" shift thinking area to watch is not effected; going forward focus on 10ppb; need to be precise about downgrading 1 mile; no one could worry is opposite effect
- Does it need to be applied at all to the north?
- Southern part is contained in existing Order so this doesn't need to be part of dialogue but continue to monitor; this is not needed in the current Order for the south
- Consider replacing the term "affected" with a better term
- Deleted-it was created at a time pre-drinking water standards and even that background level is 1/3 of current drinking water standard
- Deleted-concur with above and the use of the terminology "effected area" is confusing and sampling area should be part of the MRP and not "effected area"
- Community feedback on how it should be modified
- Retained because the migrating north plume continues to threaten domestic wells
- Same as above
- Community feedback on what buffer they want
- Same as above
- Retain the buffer to protect loss of data and seek input from well users and the community
- Modify to identify safe zones to assist realistic growth and get out from the contaminated stigma-ask each individual what they want
- Same as above
- New choice\*flexible buffer can be modified as needed
- Should be eliminated PG&E offered it to be overly precautios so that folks nearby made sure protected. Long ways from there now, now plume site, overly prescriptive
- Should be eliminated have looked at requirements Ag treatment Order already
  protects those near core and would eliminate in core area. In north area, continued
  monitoring and offering RO is a good way to protect those wells. And bottled water if
  RO not wanted.

- IRP can only require replacement water above MCL buffer should be 1 mile buffer around 10 ppb.
- Order talks about affected area and affected wells agree with affected wells, but not the idea of affected area – doesn't make much sense to call a whole area affected
- Agree with above.
- Summary there was agreement on what an affected well is over the MCL. Agreement when replacement water is required – at MCL or above. Other permits addressing replacement water – ATU. 1 mile buffer – isn't needed anymore or idea to have it extend from 10ppb line. And continued monitoring in north.

# Question 5 Monitoring and Reporting Program

- All proposals have a mixture of these things
- You have to have prescriptive to tell you where to start
- Agreed on southern plume monitoring
- How to monitor remedial progress
- Agreed on west
- We have more discussions to do on the north, the question is the Prosecution Team wants all layers monitored
- Enough monitoring has been done
- All in some aquifers and pretty close haven't moved in 2 years continue to monitor the areas that are higher
- More dialogue for the north
- If monitoring stays steady then would like to reduce monitoring
- Are there criteria to adjust sampling?
- Let the data tell us what to do
- Community is stuck on "more data is better"
- Tool of discussion tree
- Is it a win win for both sides use of decision tree
- Approach is important for future decision making
- Use data to reduce sampling
- Classic decision tree is performance is that what group is advocating?
- Look at data to see how
- After the CAO is adopted EO has authority to modify MRP as appropriate
- CAO does a good job in agreement PG&E/Lahontan on many areas with exception of north monitoring wells sampling and southern domestic well frequency – Mann-Kendall should be used to increase monitoring frequency (as well as decrease monitoring data)
- Same as above
- Hybrid in the beginning it should be prescriptive assigning a sampling frequency and should transition to performance basis based on a decision tree with agreed upon criteria
- Can't make a determination now on yes or no due to the drought if there is a low Cr level maybe only monitor once a year but not shut them down completely
- Prescriptive and performance after all plume migration has ceased
- Hybrid of prescription and performance is how it is now, using adaptive management to change over time.

- Hybrid IRP submitted comments 3/15 set sampling frequency on Cr trend at multi-level well depending on Cr history, use decision tree, use statistics of Cr to increase or decrease frequency of sampling.
- Lots of consensus on monitoring program for how to change program over time to increase or decrease based on statistical trend. Will be prescriptive these wells, these times. Couple of areas of disagreement domestic wells in south
- Need hybrid of prescriptive and performance because its logical.
- Agree with minor exception occasionally where trend shows it is good still need a safety net to go back and look at what might otherwise not get looked at. Anything can happen – western finger. Can't look down well, need to test well once in a while to make sure something hasn't happened and makes community ensured that things are OK.
- -clarify that in response went back and eliminated some of sections of MRP and relied on PG&E with extra wells to ensure that everything is OK and give community protection.
- work on lots of jobs and it is logical way to do it.
- Adapting the program over time. Additions that were added were OK and program in south is OK. In north, some of the reasons that it is not ok was spacing wasn't sufficient. But this is where we can have holistic program.
- Want to make sure we haven't missed something. Good job of containment and something freaky could happen. Is safety net to make sure that everything OK.
- Parts domestic well testing, change over time, containment
- No part is most important don't put one over the other
- All important
- Monitoring wells need to be monitored don't cut out any wells. Don't cut out the deep wells. Watch what is going on and don't eliminate because was OK in past.
- Summary fairly good consensus generally. Some differences on specifics. Especially with latest submittal. Really weren't any ideas to reach consensus.
- Modify domestic sampling for southern area to create a holistic program as opposed to leaving in ATU. Prosecution Team doesn't want to address it here.
   3 distinct programs, but there are some overlap.
- Second point is to come to an agreement that could change monitoring over time based on statistical analysis.

#### Question 6 Community Involvement

- Town Hall meetings
- Issue is complex, in order for community to see they need visuals
- Video suggested for components taking place
- People misunderstand, show them it in a way they can see
- Buy into it
- Want to go forward with what community and PG&E are doing
- Get them to buy into it so they can go forward
- Community not concerned about CAO
- Comfort level that its going forward
- Clean and easy to understand, that is what they are looking for
- Attendance is 2x's higher at community meetings
- How can we use this to talk about future
- Where is the water going in the water remediation?
- Maps created to see what is important to community
- PG&E delivers infrastructure to community
- How does community evolve from infrastructure
- Mail is good; does not read e-mail
- Does not care about scientific details
- Structure needs to be tweaked
- Community is diverse
- Structure is broad enough to serve community
- IRP managers office central location
- Room is dedicated
- Structure for Cr meetings is too much whole house water station
- A meeting with booths that people can visit more information
- Accountability, belief and trust is strong
- Build belief that what is said is going to happen
- Biggest issue is trust
- Community needs PR to build image of Hinkley
- They are rebuilding and moving past "the History"
- Make Hinkley a destination "golf course"
- Redefine Hinkley as a place that HAD a plume
- Reorientation of minds
- Small pieces of puzzle w/locations can be realigned

- With HWY 58 other elements can be brought in
- Prior Order was prescriptive
- More need for flexibility
- A lot of interest in Cr
- IRP going forward
- Resources are important
- IRP does a great job and is a good conduit and fact checker has engagement not just outreach
- Same as above
- Echo IRP letter submitted focus on 1 on 1 engagement in the home
- All community groups should work together IRP is invaluable and gives good advice – addresses not just groundwater issues but other above ground issues (tree beetles) - should address the aftermath of the last 20 years to Hinkley
- All methods should be used hard mail/e-mail/newsletters
- Same as above and also need to address aboveground issues address areas outside the community so that they are willing to reach INTO the community
- Same as above
- Same as above and community members need to have opportunity to structure their own meetings how/where/who/when they are comfortable
- Same as above-IRP is a great resource-IRP should be available to all groups out there not just the CAC and consolidate all thoughts to the Board "IRP centralized hub"
- Same as above and don't close wells
- Best structure meetings like we have been having, would like to hear more about public tours – haven't heard of any. Like tours and want to see bioreactors. Biggest concerns about implementation of CAO – discouraged about 40 year timeline. What's left of Hinkley – no school/post office, property values. Desert wilderness – letting trees dies. Want to see community restored. How to address? Will there be anyone to enjoy the clean water? Need community restoration. Even if state declared MCL met – and no health threat – reputation gone and tough to change in the broader desert public eye. Not sure of answer, but want to see community restored.
- One of things we are trying to do with CAC is get more involved with community

   invisible wall between community and CAC, trying to get community to come back. Technical information trying to get down to laymen turns. So much technical info get back to what community can understand. Don't know or understand and get back to community and get info back. Agree that tours should be going on, and PG&E could help and set up tours and take people and get it down to laymens terms because most don't understand. Get community to trust PG&E lots of misinformation. Need info to let people know what they are doing. Need more than letting them know it will be gone in 40 years. Impossible to refinance house. Need a way to get around that. People won't buy property because they can't get a mortgage. Keep people and get new people –

and will get school, stores, etc. Pass on info through CAC in terms understood. Work together so not so confusing. Property values. Issue of water OK and health OK – but property values is big issue. Feels like a petris dish and lots of experimenting on what will work.

- There are different audiences and not one vehicle to reach out to everyone. As CAC attendance went down, we looked for ways to engage and made some progress. Made some connections with pastor and community meetings. Have started discussions about what is next. Grants, scholarships, other kinds of outreach – going to school in Barstow, but reaching out. We heard some can get loans, some can't, some starting farms, farmers' markets and produce exchange and county out here to help. Participating in envisioning. Make effort to outreach. Want to work with people staying here to create vision of community. Jargon and technical info/presentation difficult for people to understand, so looking at other issues – houses, stray dogs, things that are affecting people.
- IRP manager independent IRP should be emphasized and focusing on above and below ground issues, continue to participate in background study, more oneon-one meetings, set up office to give info, meetings more workshop format, continue outreach to individual groups – bible groups, community meetings, issue specific/tech discussion – less frequent basis. Techniques – more use of tabletop models, videos of projects elsewhere, newsletter (3<sup>rd</sup> one out), possibly bi-monthly breakfast, working with planning resources – Cal Poly Pomona – to help identify future of Hinkley. Continue use of Hinkley groundwater.com. Annie – post it notes to identify the issues of concern in Hinkley. Biggest concern is trust and long-term accountability. Paid for by PG&E but think that providing a good service.
- Summary no opposing positions lots of good ideas, many of which are underway.

Last points/Closing Remarks

- Think everyone is working hard to put it back together good track.
- Working to put back together. BBQ June 6<sup>th</sup> 11-2 at Hinkley Community Center
- Lots of consensus good facilitator
- Appreciate opportunity lots of input
- Appreciate community coming was concerned about time.
- Thank community for taking personal time to give input
- Thanks to everyone for format.
- Got through lots of content in substantial way.
- Caltrans meeting re freeway widening and moving 6-8 tonight. Thanks Robert for good brainstorming from IRP. Disappointed that lots of CAC members that didn't show.

- Feel like PG&E is handling below-ground issues, but lots of residual aboveground issues to work on, including reputation and getting bankers to feel Hinkley stable and reliable enough to give loans too.
- Guy from Helendale broker used to not take calls from Hinkley, but after IRP managers presentation, will.
- PG&E reselling land? Heard that not reselling no waiting for background study. Want to get past that point. But decisions haven't been met.
- Lots of rumors one that is persistent is that there will be a sale to a large developer for a solar generating plant – 1 mile square to developer for manufacturing. Ask that would be opportunity for public comment if they were going to sell a large parcel.