



2019 Budget and Grid Management Charge Initial Stakeholder Meeting

Meeting Logistics

Date: Tuesday, July 24, 2018
Time: 10:00 - 12:00 p.m.
Location: 250 Outcropping Way Folsom, CA 95630

The following topics were discussed:

- 2019 Budget Process and GMC Rate Outlook
- Managing Employee Compensation
- Project Release Plans
- Project Summaries
- Financial Summaries
- Calendar Dates and Next Steps
- Stakeholder Feedback and Discussion

Supporting documents can be found here,

<http://www.caiso.com/informed/Pages/StakeholderProcesses/Budget-GridManagementCharge.aspx>.

Questions and comments should be directed to: initiativecomments@caiso.com.

Phone Attendees

Name	Organization
Ryan Johnson	ACES
Moe Sakkijha	APS
Don Brookhyser	Buchalter
Ryan Barr	CAISO
Geoff Gong	CDWR
Jose Vargas	City of Riverside
Steve Greenleaf	Customized Energy Solutions
Michael Rosenberg	EMTRI
Tim Cherry	MWD
Bob Caracristi	NCPA
Mike Whitney	NCPA
Vela Wann	NCPA
Steven Shoemaker	ORA, CPUC
William Belfiore	PG&E
Pam Sporborg	PGE
Cindi Cohen	RVSD
Steven Lango	SDG&E
Meg McNaul	Thompson Coburn LLP
Angela Evans	Valley Electric Association
Colin Orloff	Wellhead

Present Attendees

Name	Organization
Benjamin Piiru	BBSW
Sean Neal	Duncan, Weinberg, Genzer & Pembroke, P.C.
William Smith	Duncan, Weinberg, Genzer & Pembroke, P.C.
April Gordon	CAISO
Denise Walsh	CAISO
Jan Cogdill	CAISO
Janet Morris	CAISO
Jodi Ziemathis	CAISO
Jordan Pinjuv	CAISO
Kristina Osborne	CAISO
Pamela Kokoszka	CAISO
Ryan Seghesio	CAISO
Thomas Setliff	CAISO
Joe Nipper	LADWP
Kyle Hoffman	Powerex

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Stakeholder Meeting Comments/Questions

Stakeholder: Steve Greenleaf with Customized Energy Solutions

ISO Respondent: Janet Morris and Ryan Seghesio

Steve: Since you brought up the general construct of the GMC, you have a pretty heavy lift as far as projects and implementations in 2019. Is the expectation right now that all the implementation costs will be funded using cash funded capital?

Janet: We do intend to use the cash funded capital to fund our capital projects in our release plan for next year. Some of those projects have already started. We've already developed requirements or have completed an impact assessment. We have some degree of knowledge in terms of the size and scope of those projects. All of that is being forecasted for our capital budget for next year.

Steve: I understand it's on slide 13, a lot of the projects are still subject to an impact assessment including the day-ahead market enhancements. I just assume the circumstances change over the next three months as you're developing a budget, you'll just apprise people of any changes.

Janet: Yes, that's right, Steve. We'll also be following the policy roadmap and any changes in the policy roadmap will be reflected as we continue planning for the budget for next year. Including in the event that anything moves from 2019 to 2020 and that's as you already pointed out a possibility for some of the items on that list.

Ryan: Steve, this is Ryan. Let me just add to that real quick. What may alleviate your concern is we have that capital reserves to fall back on for capital projects that may be exceeding budgets, which doesn't happen often, or maybe there's just additional effort. It doesn't impact the revenue requirement because that component is just the collection amount.

As we build the revenue requirement this year, as April showed, we're targeting maybe \$20 to \$22 million to collect. The spend side of that is different. We'll ask the board for an amount to spend. That may be more or less than what we're actually collecting in the year. This will either add to or dip into the capital reserves.

Stakeholder: Sean Neal with Duncan, Weinberg, Genzer & Pembroke, P.C.

ISO Respondent: Doreen Fender

Sean: Just a few questions. One on the 3.25% budget and merit, you said you were going to use that percentage. What was it last year?

Doreen: Last year we were at 3% with the merit budget. It was about 10 years ago that we had any merit budget that exceeded 3%. It's been a good 10 years before we've gone up. This is due to the economic factors that we're forecasting.

Sean: Thank you. With the addition or hiring of reliability coordinator specific personnel, is any difference... this is several questions. Any difference in philosophy, any incentives provided to attract personnel? Any change in what is described above on the slide specific to RC personnel?

Doreen: To answer your multiple questions there, we have such a strong compensation philosophy that we apply that to the reliability coordinator. We did go out to market and we did benchmark our RC positions that we knew we were going to have to hire. We ensured that they aligned to our current compensation philosophy. We do have a recruiting staff over here. We have been very fortunate in being able to recruit the staff that we need to date, for what we're looking for with our current pay philosophy. Okay, welcome. Any other questions?

Sean: Maybe one other question. With regard to healthcare cost, has there been any change to the healthcare cost incurred by the ISO projected for this year and for next year?

Doreen: That's a loaded question. Based on the healthcare industry and what is happening in the economy with healthcare costs, we have done very well to manage our costs, but like other organizations, we have experienced an increase. We've been able to manage our costs and April has done an awesome job in managing our benefits burden which of course is a part of our total salary burden that we incur. To answer your question, we've seen increases like other organizations but we've been... I feel very good that we will be able to manage those costs below what industry is experiencing. Welcome.

Stakeholder: Sean Neal with Duncan, Weinberg, Genzer & Pembroke, P.C.

ISO Respondent: Janet Morris

Sean: With regard to the automated dispatch system, do you have a point... can you point either within the current documentation if there is an anticipated projected budget amount for that or will that be available over the course of the budgeting process this year?

Janet: It will be available if not posted already.

Janet: Okay. Yes, that will be provided as we progress. In terms of other documentation, I can share with you that we plan to publish our external business requirement specification before the end of this month. We also have a stakeholder call scheduled on August 15th to discuss the ADS scope with our stakeholders as there is some interest in seeing changes. There's been some other proposed changes made by market participants and we want to hear those, consider those and potentially phase those as needed.

Sean: Okay. Thank you. On the day-ahead market enhancements, is there any... is there projection that there will be any additional budgeted cost for day-ahead enhancements for next year other than... I mean we have the budget amounts for this year and there's still months to be extended but for next year.

Janet: Yes. The majority of the cost will be next year for the day-ahead market enhancements, what was done this year was a proof of concept. The proof of concept was to address if the mathematical calculations, the numerical analysis could be done by our software algorithm in the time requirement for the day-ahead market timeline. We've executed that proof of concept. We do have some results from that. That is allowing us to continue with the stakeholder process with confidence that we'll be able to have a solution.

We've also learned of course from that proof of concept areas where we might want to guide our stakeholder process and potentially move things beyond 2019 as Steve mentioned through his question before. We might start to see some of that develop. I'm not an expert on that myself but the cost that you see in 2018 have to do with that proof of concept. Some early work with our software vendor to prove the algorithm could handle a 15-minute number of mathematical calculation.

Sean: There's been discussion about extending the day-ahead market the EIM, is that contemplated for any implementation activities over 2019?

Janet: No, not in 2019.

Sean: Okay. Are there any aspects of the day-ahead market initiative currently that our interests appear to be attributed or allocated specifically to EIM entities as opposed to ISO customers?

Janet: There is the thought that the day-ahead market enhancements could be extended for EIM and that's an extension beyond the stakeholder process. The soonest that that would be considered will be 2020 or 2021. From a funding perspective, that would follow. There's not to my knowledge any funding that would be allocated towards the EIM extension of the day-ahead market enhancement in 2019.

Sean: Okay. Thank you. The last question on this topic is on the market ahead and the market performance and planning forum, there's discussion of significant software work on commitment cost and default energy bid enhancement. The same with contingency modeling enhancements. Can you explain a little bit about the process with regard to how the software costs are identified and brought into the budget process just in terms of the timing and the process for getting them to you?

Janet: Okay. At times macro level, we look each year ahead to the next year, two years, three years and develop a high-level order of magnitude for each item that's been proposed either through the policy roadmap or through our internal departments proposing project requests to us. We rank order that list. Then as those requests start to come forward, either because the policy phase has completed or the business unit has brought that request forward. We start to do an impact assessment.

During the impact assessment, we get an idea of what systems will be involved, what processes we'll need to change, what the organizational impacts are. Other things like tariff, BPM, need for market simulations. There's a long checklist of things that are evaluated for every request, every project request based on the scope that's known at that point in time. For policy initiatives, the scope is pretty well defined by the time we have a draft, final proposal.

For other projects, we have to go through a similar scoping exercise. Then we go through a process of detailed business requirement specifications where our business analyst will be working with our business units around market participants spends to develop the initial business requirements that then goes through an architectural review. Then their business requirements are finalized including the data changes of the data requirements and other things that follow after the architectural decisions are made.

That gives us the final business requirement specification that becomes a statement of work for gathering estimates. Estimates are then received from internal software development and testing teams as well as any vendors that will need to be engaged and any other sources of cost. Whether it be hardware, software, labor or other... that's usually what it is. It's hardly ever anything else.

Those estimates are then gathered into a project plan and presented to our corporate management committee for approval. The funding of the project until that point is done through what we call initialization funding. The project management office has some discretion. I think you see it on the year... on the list every year. We have a discretion of \$200,000 to seed projects to the point of funding approval. Does that get at your question or is there something more that you're looking for?

Sean: No, thank you.

Janet: Okay. Good. Thanks Sean. Okay. Any questions on the phone that I could take at this time?

Stakeholder: Sean Neal with Duncan, Weinberg, Genzer & Pembroke, P.C.

ISO Respondent: Janet Morris

Sean: Just a couple of other questions. One on EIM with regard to Power Ex's recent waiver application, is it anticipated there will be any additional project expenses to implement any waiver requests, if granted?

Janet: There is nothing that's been budgeted for that, as of yet. That waiver has not yet been ruled upon by FERC. We're still waiting to hear about that. We have had a stakeholder process called EIM offer rules where there has been a discussion about default energy bids. That may spawn some future stakeholder initiative but that's going through more... a set of workshops to determine next steps.

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Sean: Thank you. Also, with regard to the process and balance conformance enhancements, this question... there have been budgeted out like for that initiative or and if so, is there any proportion or part of that that's attributed to EIM entities as opposed to ISO customers as a whole?

Janet: The imbalance conformance enhancements at the moment, we do not anticipate requiring any system changes. All the work necessary to make BPM, tariff changes and anything else required in our business processes will be handled by our current staff. At this point, there's no cost that's allocated towards EIM or towards capital.

Stakeholder: Sean Neal with Duncan, Weinberg, Genzer & Pembroke, P.C.

ISO Respondent: Jan Cogdill, Janet Morris and Ryan Seghesio

Sean: On EMS, is there any amounts we're throwing over to next year on the active list indicative of what...?

Jan: We're hoping that it will be implemented this year. Generally, on a lot of our contracts, we do have warranty payments that actually come through the following year but that's not new money. That comes out of their original budget. It's just I can't necessarily close them out financially until I get the final invoice. Our main vendor usually has a year of warranty and we then pay them a percentage whatever had been determined as their warranty. A 5% or 8% carry over whatever was negotiated in the contract. That's not new money. That's what I track from prior year's approvals.

This year [2018] I'm tracking against an \$18 million budget. We will not approve anything above \$18 million. We may not spend all that \$18 million this year. It could be less if we don't approve all of the projects or use all of the budget in which case, the budget rolls into the reserve for future years projects. I don't take any money away from the approved projects.

It's not a use it or lose it scenario. We maintain a track until that project is now complete and all invoices are in for each one. At that point if there's a variance against the original budget then yes, that rolls back into the reserve for future years. You'll see that in the closed projects list. Occasionally they might go over. We have to manage that within the original budget.

- Sean: When do you specify any excess would go over into the operating reserve? At what point is it? On the annual basis or is that...?
- Jan: It's not going to the operating reserve. It's going back into the capital reserve. We track project spend against budget until the project goes into production and all of the project related invoices are recorded. When it's finally closed then, whatever that delta is is now technically rolled into the reserve because we track on a long-term forecasting basis. We know how much we spent and how much we're forecasting. There's a true-up to actuals reconciliation at the end of every year, we actually true-up to how much was really spent against our reserve. I track against a master reserve amount that I reconcile every month to determine how much we've spent against that reserve or overall funding and how much we've now accrued against it.
- Sean: On the CRR option efficiency process, there's about \$554,000 budget for phase 1A. Do you have an anticipation if there's any similar cost or budget amount for future phases 1B or so forth?
- Jan: Yeah. I will defer to Janet here, because there is the 1B in the planning. Again, we don't have a cost yet. Go ahead.
- Janet: We're still developing the business requirements for the CRR 1B. As soon as we do we'll be able to get estimates. We do anticipate there will be capital cost but would be considered unplanned from the perspective of the 2018 master lift. It may be a case in which we potentially displace a project on the 2018 list in order to fund, since that has gone forward to the board for approval.
- Sean: Okay. Thank you.
- Jan: In that case, we actually do have some money set aside. I mean, we forecasted in our master list. Janet and I work through that monthly, looking at projects, looking at what she knows is on the horizon. We may have to defer a 2018 project to the 2019 list. Though we have to manage to our \$18 million budget. Believe me, our CMC members, point that out to us.
- We're very aware of that and at this point we do have a little extra... from what we thought the CRR was going to be for the 1A came in a little bit less. There's still some forecasted money but until we know the actual cost that can change. The master list is fluid. We do what we have to do, so if we need it for policy issues or because of some other critical issue then we can handle it.

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Sean: Thank you. On the active list the iron point lobby redesign, is that a project that's occurring next calendar year and if so can you explain?

Jan: That project, it just went through another review with Steve, the CEO. That was funding to revamp displays. It's not the lobby itself. It's the displays and trying to bring them up a little bit more into an interactive and reflect more where we are today, as the current displays were built when we moved into this building. It was looked at to be a potential phase approach. It's been reviewed. The original designs have come. I think they've agreed to maybe do a small piece. I don't know, Ryan were you in the meeting with Steve?

Ryan: No, that project essentially is being re-scoped and delayed. It was deferred because we've looked at some non-essential projects that were in the pipeline and taken those out because of the RC funding that we're having to absorb this year. It's going to be downsized from what it was originally.

Sean: It looks like the stakeholder initiatives for addressing community Aliso Canyon changes in gas and electric coordination as concluded, is there anything in the release plan or anything in the stakeholder for the following year, can be geared toward looking at the Aliso Canyon coordination issues.

Jan: I'll defer to Janet on that case.

Sean: Okay. Thank you. Last question I have on this is, is there anything budgeted or planned with regard to regionalization for next year?

Jan: At this point I don't believe so.

Sean: Okay.

Jan: Subject to change obviously. At this point we're not planning on something that we have no clue whether it will happen.

Sean: Okay. Thank you. Thanks, appreciate it.

Stakeholder: Sean Neal with Duncan, Weinberg, Genzer & Pembroke, P.C.

ISO Respondent: Denise Walsh and Ryan Seghesio

Sean: I just had a couple of questions regarding the audit financial statements.

Denise: Okay.

Sean: There was a comparison on current assets 2017 to 2016 that a decrease due to collateral funds held by market purchase spends. Can you explain why you started decreasing collateral funds?

Denise: Sure. That's actually money that we hold obviously for collateral and some of the other market funds. The reasons for that is, there were different things going on throughout the year. This collateral going back and forth all the time and it's a fluid number but nothing out of the norm.

Sean: Okay. It's just a natural fluctuation.

Denise: Sure. You'll see that on our posted quarterly financials as well.

Sean: Okay. Then, of our non-current assets, there's a decrease due to transfers to cash and cash equivalence into short term securities from long term investments. Can you explain a little bit why the transfer from the longer-term investments to the short term and cash and cash equivalence?

Denise: That was probably due to maybe bonds maturing or some issue like that. We are continuously looking at the investment strategy that we have alongside of our policy and we try to invest as much as we possibly can, Sean. Anything like that will probably be there just temporarily, if it was any sort of large amount.

Sean: Okay. On that subject, there some discussion in the... well, not quite in these financial statements. I think in the quarterly reports in terms of accounting for increase in the interest rates and occurrences to this may change into how you're addressing your non-current assets based on increases in the interest rates?

Denise: How are we addressing current assets?

Sean: The non-current assets due to, or account for the investment strategy due to increases in interest rates.

Ryan: Let me jump in Sean. This is Ryan. I mean, just to further that discussion, I'm not looking at the numbers you're looking at but you had less long-term investments that rolled down the curb into short term investments this past year because we've been purchasing less long term. The way the accounting works is the cash and cash equivalents are anything with an original maturity of 90 days or less; the short term investments are anything with an original

maturity greater than 90 days but less than one year; and the long-term investments is anything more than 1 year.

With rates rising, we're putting less to work out long term, because it's a very flat yield curve. You can get the same yields or close to the same yields shorter on the curve. You're purchasing less long-term investments. Therefore, you have less rolling down into the short term in the comparison. Now, the impact of the higher interest rates, is that we're reinvesting money that's maturing at higher rates.

That's impacting our other income in April's components of the revenue requirement. We're seeing greater interest income. I think you can see it there in the financials. I believe we saw a million to a million and a half more interest income last year versus the previous year and that's reflected in the other income category.

Sean: Okay. Thanks Ryan.

Ryan: Thank you.

Stakeholder: Ryan Barr with CAISO

ISO Respondent: Ryan Seghesio

Ryan B: I have two questions about slide 24. First, I'm just wondering if you could speak to why the cumulative expenditures are so much lower than the budget capital. Then second, I just want to confirm that approved projects means spend that has not yet occurred but is approved to occur this year. Thanks.

Ryan S: This is Ryan again, let me address that. Yeah, the board approves the \$18 million you see at the far right-hand side. It's really the commitment level that we can take on this year. The CMC committee that Janet was talking about has approved 11.1 million in projects so far. That's just the committed amount. Obviously, it takes sometimes multiple years to spend that on the project.

The blue line is the actual cash out the door. The big discrepancy that you see in the mid-year like this, a lot of that's weighted towards the end of the year. The fall release being the big technology upgrade that happens every year. You'll see a lot of expenses ramp up as you get into the fall as those projects are completed as part of that fall release. Does that answer your question?

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Ryan B: It does, yeah, thanks.

Stakeholder: Michael Rosenberg with EMTRI

ISO Respondent: April Gordon

Mike: My question is, if we have specific comments, specific proposal, is that something we should submit with July 31st deadline? Then you take it inside?

April: Yes.

Mike: Okay. I think this is clear. Thank you.