

The ISO received comments on the CAISO Harry Allen-Eldorado 500 kV line project economic analysis results stakeholder meeting discussion held on November 20, 2014¹ from the following:

1. Bay Area Municipal Transmission group (BAMx)
2. California Public Utilities Commissions (CPUC)
3. LS Power Development (LS Power)
4. Pacific Gas & Electric (PG&E)
5. Southern California Edison (SCE)

Copies of the comments submitted are located on the *2014-2015 Transmission planning process* page at:

<http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=DC8C3E59-F7E6-41E5-BDFB-A0CB43BB4EB2>

The following are the ISO's responses to the comments.

¹ For stakeholder convenience the Harry Allen-Eldorado 500 kV line project economic analysis was presented during the regularly scheduled meeting for the 2014-2015 Transmission Planning process held on November 19 and 20th, 2014.

No	Comment Submitted	ISO response
1	<p>Bay Area Municipal Transmission group (BAMx) Submitted by: Robert Jenkins, Barry Flynn and Pushkar Wagle</p>	
1a	<p><i>CAISO Needs to Perform Sensitivity Analysis for Capacity Benefits</i> The CAISO's preliminary findings indicate substantial capacity benefits associated with the Harry Allen-Eldorado 500 kV line project (HAE). The CAISO's most recent capacity benefits calculations as presented during the November 19-20, 2014 stakeholder meetings are projected to be around \$10.2M per year or \$141M (\$171M) over fifty years using a 7% (5%) discount factor. We understand the CAISO has derived capacity benefits based on the assumptions that California will continue to have a resource adequacy requirement and that Nevada can be the source of contracted capacity to serve California load. Additionally, a key assumption for these savings is that the future cost of capacity in Nevada will be significantly less than the cost in California. For these assumptions to hold true in the long run, the following conditions need to persist:</p> <ul style="list-style-type: none"> *A need in California for system capacity above current in-state capacity plus expected future capacity needed for local and flexibility requirements. *The capital and fixed operating costs for a peaking unit must remain less in Nevada as compared with a California peaking unit or preferred resource, and translate into a system capacity price difference that will be passed on to the buyers. *There will be a greater resource surplus in Nevada than in California during the early years of the project resulting in a lower demand for capacity in Nevada as compared to California. <p>BAMx considers such a set of conditions to be unlikely. Alternative scenarios are much more likely, given that California has a surplus of system resource adequacy (RA) capacity with projected planning reserve margins of 118% in 2030 and 115% in 2034 as modeled in the CPUC's latest RPS Calculator (Version 6.0, "System_Capacity" tab 9). The CAISO analysis assumes</p>	<p>The ISO's system capacity need studies referenced in the 2013-2014 Transmission Plan and in the Supplemental Assessment of the Harry Allen-Eldorado 500 kV Transmission Line Project Economic Need (Supplemental Assessment) have consistently demonstrated a resource capacity need in the 2020 time frame. Those studies assumed the CPUC-authorized local procurement, including flexible conventional resources, were in-service.</p> <p>Given that NV Energy has agreed to participate in the ISO's energy imbalance market (EIM), flexible capacity in Nevada can satisfy the flexible resource capacity and traditional resource capacity needs of the CAISO.</p> <p>Please see response above regarding NV Energy's participation in EIM.</p> <p>The ISO is not aware that the TEAM methodology specifically prescribes an arbitrary splitting of benefits. The ISO has relied on past industry experience to base the assumption that the capacity market is sufficiently competitive such that the reductions in costs are reasonably expected to reach the purchaser. Further, we see this as an evolution of the TEAM methodology that will need to be clarified at some point.</p> <p>The Harry Allen-Eldorado project involves extending the ISO grid further to the east, enabling new resources to connect directly to the ISO-controlled grid, which further reduces expectations that new resources in Nevada and the Desert Southwest would retain an above-market premium.</p>

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	<p>California will be resource deficient by 2020-22. In the past, CAISO included a source to indicate the California resource deficiency in 2022, but in this case CAISO identified only flexibility deficiencies, rather than system resource deficiencies. So far, the CAISO has not provided any justification why new resources should be assumed to be built in Nevada instead of within California to satisfy the flexible upward ancillary services and load following need. We understand that the need for flexible resources is determined by the CPUC and our expectation is that the CPUC would authorize the jurisdictional utilities to procure the needed capacity. The CAISO needs to explain why it is reasonable to assume that the Load Serving Entities (LSE) will procure this capacity from Nevada rather than resources which also have local capacity attributes. Most importantly, to the extent the out-of-state resources studied in the case of HAE evaluation are not within the CAISO Balancing Authority Area (BAA), unless they are Pseudo-Tie or Dynamic Scheduled resources, under current flexible resource adequacy rules, they would not be eligible to provide flexible RA capacity. While the CAISO is investigating the potential for creating mechanisms for allowing inertia resources to address the CAISO's 15-minute flexible resource needs, these mechanisms are not yet in place. Even if such mechanisms are developed in the future, unless the inertia resources can be dispatched on a 5-minute basis, their flexibility value will be lower than for resources within the CAISO BAA that are dispatchable on a 5-minute basis. The CAISO should explore alternative scenarios and evaluate their impact on the capacity benefit associated with the candidate transmission projects. Furthermore, the CAISO's capacity benefits calculations assume that the entire capacity benefit would be conferred on California consumers. The CAISO-developed Transmission Economic Assessment Methodology (TEAM), in contrast, assumes that the capacity benefit is split equally between the buyers and sellers of capacity.</p>	
1b	<p><i>Changes in Incremental Increase in Path 46 Transfer Capability Need to be Adequately Explained</i> CAISO's Final 2013-14 Transmission Plan assumed that adding the Harry Allen – Eldorado 500 kV line to the system created only 150MW of incremental import capability. However, the analysis presented in the CAISO Stakeholder meeting on November 19-20, 2014 assumed that HAE increases the same import capability by 200MW. BAMx would like to see an explanation for how the</p>	<p>As stated in the 2013-14 Transmission Plan, the binding constraints identified on Path 46 during summer peak conditions was the Sycamore-Suncrest 230 kV and the Imperial Valley – ECO-Miguel 500 kV lines. As explained to stakeholders in the November 19 and 20, 2014 stakeholder meeting, the ISO is now planning to bypass the series capacitors on the Sunrise and SWPL lines which will alleviate those constraints. In the November 20, 2014 Harry Allen-Eldorado</p>

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	<p>incremental capacity is calculated and why the CAISO has assumed a higher increase in transfer capability. All energy imports plus the ancillary services provided by out-of-state resources are subject to the California import limits. For instance, the CAISO's flexibility studies assume CAISO import limit of approximately 12,992 MW. Does HAE incrementally increase that limit by 200 MW? If not, it cannot be counted to provide flexible capacity.</p>	<p>economic assessment stakeholder presentation and in the Supplemental Assessment report, the binding constraint identified on Path 46 during summer peak conditions is the Mead-Marketplace 500 kV line. The proposed project is more effective at meeting the new constraint and results in creating 200 MW of incremental transfer capability.</p> <p>The ISO's studies focused on the increased transfer capability from Nevada and the Desert Southwest during high internal renewable generation in the same area. This was considered to be the most likely stressed condition. Simultaneous ISO Import from the Northwest, Nevada, and the Southwest was not the focus of the study, but was also not considered to be a study concern. Simultaneous ISO import capability estimates are empirically based on historical resource availability and transmission capability. The allocation of imports across the various import paths is likely a critical factor in determining the theoretical maximum simultaneous ISO import capability. Increasing the amount of imports from Nevada and the Desert Southwest which is closer to the largest California load centers than imports from the Northwest would be, is most likely the best way to increase the simultaneous ISO import capability.</p>
1c	<p><i>Discount Rate Used for NPV Calculations Should be Consistent with TEAM</i></p> <p>The benefit-cost ratio (BCR) under TEAM implemented for the Palo Verde Devers #2 500kV line (PVD2) project used a real discount rate of 7.16 percent. This figure represented a utility's weighted cost of capital (i.e. debt, preferred stock, and common equity). The CAISO's BCR calculations for HAE are presented under two different discount rates, i.e., 5% and 7%. BAMx would like the CAISO to provide a rationale for using these two discount rates rather than maintaining the discount rate of 7.16% that was originally used under the TEAM methodology.</p>	<p>The ISO utilizes a return on equity (ROE) that is based on the expected ROE that FERC would authorize for the project sponsor for this project. The discount rate is based on a societal perspective. Societal investment opportunities are generally different than utility investment opportunities. Societal investment opportunities with a 5% to 7% real rate of return are reasonable to expect over the next 50 years.</p>

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1d	<p><i>The Cost of HAE Should Not Be Borne Solely by CAISO Ratepayers</i> The Harry Allen-Eldorado line's 75-mile length lies primarily, if not exclusively, within the service area of Nevada Power and connects to the CAISO system at its boundary at Eldorado. As such, the line connects the CAISO and WestConnect BAAs. While the CAISO's analysis shows potential benefits to the CAISO BAA, it also shows substantially increased power sales opportunities from Nevada Power-owned combined-cycled plants in southern Nevada. This strongly implies Nevada Power as a potential beneficiary as well. It appears that California electric customers are being asked to fund a transmission line in an external utility's footprint to overcome that utility's internal transmission constraints to facilitate greater electric sales to California without that utility sharing in the project cost. Because the proposed project is an interregional project that is outside the CAISO balancing area, BAMx requests that this project be considered as an Interregional Transmission Project under the CAISO's Board-approved compliance plan for FERC Order 1000 interregional requirements. While BAMx acknowledges that the various regions' compliance plans are still working their way through FERC approvals, the Harry Allen-Eldorado line is not reliability driven and therefore not time critical. With benefits potentially being incurred in both regions, this project is a strong candidate for cost sharing under FERC Order 1000. Therefore, this project should be considered in the Annual Interregional Coordination Meeting. Furthermore, through this interregional process the benefits and cost allocation associated with terminating the line at Harry Allen rather than the much closer Mead Substation can also be addressed.</p>	<p>BAMx is correct that the CAISO's analysis identifies benefits for CAISO ratepayers. There are identified economic, reliability and renewable integration benefits identified for ISO ratepayers as described in the Supplemental Assessment.</p> <p>Although the line would provide additional opportunities for resource development in Nevada, it is not clear who would ultimately realize those benefits. It could be either merchant generation developers or utility owned generation. In addition, the current uncertainty over FERC Order 1000 would further exacerbate any effort to determine a cost sharing arrangement. Waiting for FERC Order 1000 inter-regional coordination issues to be resolved could take years and would forego the identified benefits for California ratepayers, unnecessarily.</p>
1e	<p><i>Need to Seek Further Stakeholder Input Prior to Board Recommendation</i> This proposed project has not been sufficiently analyzed and reviewed with stakeholders. At the one stakeholder meeting on November 20th that contained a review of this project, some stakeholders were referred to analysis performed on another line to obtain data assumptions made about this project. Also at the meeting, the CAISO indicated that the analysis shared was preliminary and subject to change. Stakeholders were told that CAISO Management had not decided whether to recommend the project to the Board, yet indicated Staff expected to bring a recommendation to the Board at the upcoming December Board meeting. This will leave stakeholders a few days at best to review the</p>	<p>The Harry Allen-Eldorado 500 kV transmission line project has been analyzed in the last two transmission planning cycles, with generally favorable results. The most recent updated analysis contained in the Supplemental Assessment report follows the same methodology as the recent Delaney-Colorado River 500 kV line economic analysis. Stakeholders have essentially participated in two years of study on the Harry Allen-Eldorado project which is sufficient time for providing input. Further, management provided this final round for stakeholder input prior to finalizing its recommendation.</p>

No	Comment Submitted	ISO response
	latest analysis and decide what their response should be. This is not a normal process and does not provide adequate time for Stakeholder input.	

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2	California Public Utilities Commission (CPUC) Submitted by: Keith White	
2a	<p>3. Capacity Benefits Accounting for Over Half of the Value Attributed to the Harry Allen-Eldorado Transmission Project Should be Calculated in a More Robust Manner Including Circumstances that May Yield Significantly Lower Benefits, also Recognizing that When Considering the Range of Energy and Capacity Benefit Uncertainties this Project May Not Be Cost- Effective, at Least if Funded Entirely by California.</p> <p>Preliminary results presented for economic assessment of the Harry Allen-Eldorado (HA-E) transmission project show a benefit-cost ratio of 1.06 and 1.14 for 7% and 5% real discount rates, respectively. Energy benefits based on locational marginal prices accounted for slightly less than half of total benefits and across a range of sensitivities ranged from zero (high DG RPS portfolio) to almost 2X the benefits under base assumptions (if assuming high load growth).</p> <p>In contrast, only a single value was calculated for capacity benefits, based on the calculated 200 MW increase in RA import deliverability due to the HA-E project. The methodology for calculating capacity benefits was stated to be the same as the methodology used in the previous TPP cycle for calculating capacity benefits for the Delaney-Colorado River transmission project. This methodology assumes that (1) California is in capacity deficit prior to 2020, (2) the desert southwest reaches deficit in 2025, (3) from 2025 onward there is a capacity cost advantage (\$41/kW-year in 2025) for new capacity obtained from the desert southwest that reflects a lower estimated levelized cost for new aeroderivative CTs (\$142/kw-yr in the desert southwest vs. \$182/kw-yr for California), and (4) from 2020 through 2024 the capacity cost advantage for the desert southwest is even greater (ranging from \$107/kW-year to \$51/kW-year) due to a capacity surplus</p>	See response below.

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	<p>situation in the desert southwest. An implicit assumption is that the cost advantage for sourcing capacity from the desert southwest is captured entirely by California ratepayers, and not at all by desert southwest suppliers.</p> <p>The above assumptions give an optimistic, high-end estimate of CAISO area capacity cost savings for obtaining 200 MW of additional import RA capacity made possible by the HA-E project. The following reasonable sensitivity assumptions would lower this capacity benefit:</p> <ul style="list-style-type: none"> i. Desert southwest suppliers capture a significant portion (at least 1/2, as an alternative bookend to zero) of the capacity cost advantage relative to California, ii. Existing desert southwest capacity surplus may cease to be available for export prior to 2025, especially when considering the 400 MW of such surplus already assumed (in the 2013-2014 TPP analysis) to be incrementally sold to California via the Delaney-Colorado River project. iii. The CAISO system may not need or experience full (or any) economic value for 200 MW of system RA assumed to be imported over the HA-E project, particularly not for the full assumed 2020-2069 period. This could occur either because there is not a CAISO area system capacity shortfall as early as 2020, or if there are needs for local and flexible capacity such that filling such needs would also provide "system" RA and reduce or eliminate any residual need for system RA capacity. <p>Therefore, just as energy benefits are appropriately assessed across a range of relevant and informative sensitivities, capacity benefits for the HA-E project should also be assessed across a range of sensitivities. Such sensitivities appear to have the potential to generally yield lower, not higher, capacity benefits relative to what was presented in the November 20, 2014 meeting.</p> <p>Finally, we note that under FERC Order 1000 and under the CAISO and other western transmission planning regions' Order 1000 interregional filings with FERC, interregional transmission projects such as the HA-E project could be assessed for benefits accruing to multiple regions, which might share in project costs.</p>	<p>The following subparts correspond to the subparts in the left hand column:</p> <ul style="list-style-type: none"> i. Please see response above to a similar comment from BAMx. In addition, the ISO did not consider sensitivities where generation had market power to extract profits beyond what would be obtained from a competitive market. To do so would also need to consider market power adversely impacting LMPs inside California and would tend to increase the benefits of the increased import capability provided by the Harry Allen-Eldorado 500 kV line. ii. The 200 to 300 MW of increased transfer capability identified by the ISO as attributable to the Delaney-Colorado River project was identified as being applicable to accessing additional generation in either the Desert Southwest or in Imperial County. Therefore, it is not clear how much of this increase in transfer capability will be utilized by Desert Southwest generation. iii. Please see ISO's response to similar comment from BAMx. <p>Sensitivity studies need to be performed by the ISO for the energy benefits because most stakeholders are unable to perform those studies. However, capacity benefit economic calculations are straightforward linear calculations that are performed using a spreadsheet and can be performed by stakeholders themselves wanting to assess a broader range of impacts. However, the ISO disagrees that its capacity economic benefit assumptions are optimistic. The Harry Allen-Eldorado 500 kV line would have a capability that is much higher than 200 MW. In addition, if the Midpoint-Robinson Summit 500 kV line is built at a later date then the import capacity benefits could increase.</p> <p>Please see ISO's response to BAMx's comment regarding Order 1000.</p>

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3	LS Power Development, LLC Submitted by: Sandeep Arora and Lawrence Willick	
3a	<p>Harry Allen Eldorado Project should be recommended for CAISO Board approval: CAISO Management should recommend the Harry Allen to Eldorado 500 kV Transmission Project (“Harry Allen-Eldorado”) for approval by the Board at its December meeting. As shown by the recent CAISO studies and the economic study work done including in the 2012-2013 Transmission Plan and 2013-2014 Transmission Plan, Harry Allen-Eldorado provides economic benefits for CAISO ratepayers. At the stakeholder meeting CAISO staff mentioned that certain additional economic benefits (related to EIM) were not yet captured in the latest study runs and once quantified, will lead to an increase in total benefits. While LS Power agrees with CAISO that these additional benefits should be quantified, the benefits calculated to date are strong enough for CAISO Management to recommended Harry Allen-Eldorado for approval at the December Board meeting. Besides economic benefits, additional policy & reliability benefits also exist from this Harry Allen-Eldorado, which, although not quantified, should be factored into the decision making.</p>	<p>Please see the identified reliability and renewable flexibility benefits described in the Supplemental Assessment.</p>
3b	<p><u>Energy & Capacity Benefits</u> As shown in CAISO studies, significant energy savings are expected by Harry Allen-Eldorado for the base case scenario and almost all sensitivity scenarios. In addition to energy benefits, significant capacity savings from Harry Allen-Eldorado exist. CAISO estimated the capacity benefits by using a methodology consistent with what was done for analyzing similar benefits from the recently approved Delany-Colorado River project. CAISO’s calculation is based on system capacity shortfall projections in CAISO in future years, but only looks at the impact of the project on Path 46, while the project will provide access to additional capacity resources beyond just its impact to Path 46. LS Power supports CAISO’s calculation of capacity benefits, and believes additional capacity benefits exist beyond those quantified by CAISO.</p> <p>CAISO recently released its Stochastic Modelling testimony for the CPUC Long Term Planning Procurement study work. This study further reinforces</p>	<p>Thank you for the suggestions on quantifying additional benefits which support the ISO recommendation to proceed with the project.</p>

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	<p>CAISO's findings that there is risk of capacity shortfall in California, specifically a potential capacity shortfall of 8292 MW in 2024 to meet the 1-in-10 planning standard and avoid Stage 1 & 3 emergencies. The maximum shortfall identified in the study was 16,745 MW. The CAISO study concluded that <i>"The most frequent capacity shortfalls occurred in July from hours 18 to 20, after the peak load hour when solar generation production drops prior to the evening reduction in load. Traditionally planning focused only on peak load hour. With the increase in renewable generation, the traditional planning reserve margin approach focusing on peak load hour has become insufficient and outdated. The results of the CAISO's study confirm that planning to meet peak load hour requirements is not necessarily sufficient to maintain reliability."</i></p> <p>Given this, LS Power believes that the 202 MW incremental capacity benefit is an "under-estimation", as this was calculated at the traditional peak hour, which is typically Hour 15, and only based on the impact of an increase to Path 46. If CAISO's studies are repeated for Hours 18-20, the largest hour of need, the incremental capacity benefit on Path 46 would be much greater than 202 MW, since the WOR path will not be as stressed during non-peak hours.</p>	
3c	<p><u>NPV Calculation</u></p> <p>LS Power believes CAISO's calculation of the net present value of the benefits of Harry Allen-Eldorado underestimates the lifetime project benefits due to the discounting of values expressed in real dollars. Slide 85 of the Day 2 presentation (Slide 10 of the Harry Allen-Eldorado analysis) identifies an annual capacity savings of \$10.2 million. The next slide (Slide 86) describes the CAISO methodology of assuming constant real savings, and that the present value over 50 years of the capacity savings is \$141 million (at a 7% discount rate). However, if the \$10.2 million is extrapolated in constant real dollars, the net present value over 50 years should be \$10.2 million x 50 = \$510 million, at least at a discount rate equal to inflation. In order to perform the net present value calculation at a different discount rate, the values would first need to be escalated at inflation to year of occurrence values, then discounted back to present value at the desired discount rate. So the net present value of \$10.2 million in constant real</p>	<p>The 7% discount rate was one end of the range of the discount rates considered from a societal perspective to reflect the time value of money in real terms. While levelizing the revenue stream provides a means to gauge the approximate value in each year in real terms, discounting using the real discount rate remains necessary to consider the present value of the revenue stream at the time the investment decision is made, consistent with the consideration of the costs.</p>

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	dollars, over 50 years, assuming 2% inflation, and a 7% discount rate would be \$185 million, not \$141 million, and overall the net present value of benefits calculated by CAISO should be approximately 30% higher than shown.	
3d	<p><u>Incremental reliability & policy benefits of Harry Allen-Eldorado</u> In addition to the quantified economic benefits, there are certain qualitative reliability and policy benefits of Harry Allen-Eldorado. This line helps, to a certain extent, improve the deliverability of renewables from the Imperial Valley renewable energy zone, as well as renewables in Southern Nevada. In addition the line provides improvement in reliability by reducing several post contingency line loadings as shown by studies conducted by LS Power and also documented in the 2013/14 CAISO Transmission Plan.</p>	Please see the identified reliability and renewable flexibility benefits described in the Supplemental Assessment.
3e	<p><u>EIM Benefits</u> CAISO and NV Energy have announced the expansion of EIM markets to include NV Energy starting in 2015. Harry Allen-Eldorado will increase transmission capacity for EIM purposes and will thereby provide increased EIM benefits to CAISO and NV Energy. As CAISO stated at the November stakeholder meeting, these benefits are not yet fully quantified in the studies performed by CAISO to date and once EIM is fully modelled the economic benefits from Harry Allen-Eldorado will increase. LS Power agrees that more fully modelling EIM would help account for additional benefits that the model is currently unable to capture due to the nature of 1-hour used for the ABB Gridview study runs vs 5-min dispatch for the EIM. Further, looking at the previous EIM benefit study work done for CAISO, PacifiCorp and NV Energy by ABB and E3, new transmission capacity additions do create significant savings from dispatch efficiency improvements and reduced minimum reserve holdings, which translates to economic benefits.</p>	The ISO agrees that further refinements to the EIM modeling is likely to reveal further benefits. However, the current modeling is comprehensive.
3f	<p><u>Benefits of Earlier In Service Date</u> Finally, LS Power would like to ensure that CAISO recognizes the many benefits of an earlier in-service date for the project. In the solicitation for the Delaney – Colorado River 500 kV transmission Line, CAISO stated there would not be any additional benefit for an in-service date for the project prior to 2020. For the Harry Allen-Eldorado 500 kV project there are many significant benefits that could be realized from an earlier in-service date:</p>	Assuming that the project is approved, the solicitation process takes time to allow sponsors to prepare submittals and to evaluate those submittals. As a result, the successful project sponsor would not be known until close to the end of 2015, which would leave four years to permit and construct the project prior to 2020. This is a reasonably aggressive schedule, so advancing that schedule does not seem realistic.

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	<p>1. CAISO's estimated benefits of the Harry Allen-Eldorado (slide 81 of the stakeholder presentation) show higher economic dispatch savings in 2019 than 2024. Therefore an earlier in-service date would help to achieve a higher total benefits.</p> <p>2. CAISO uses a relatively high discount rate, 7%, to calculate the net present value of benefits. Therefore benefits in 2019, or even an earlier year, would have a higher value to ratepayers.</p> <p>3. A project with a later in-service date would have a higher cost, due to the impact of inflation and overall escalation on the project costs. At 2% per year, the impact to ratepayers of a 2020 in-service date compared to 2018 is 4%, and the impact on the overall benefit: cost ratio would also be 4%.</p> <p>4. Bringing this Harry Allen-Eldorado in service sooner than 2020 is prudent as it would also help address the risk of capacity retirements due to Once Through Cooling (OTC) policy compliance. Year 2017 is a major year for OTC compliance. Over 5000 MW of existing OTC units have to either demonstrate OTC compliance by Dec 31, 2017 or else they could become inoperable starting in 2018. Bringing this new transmission line in service by June 2018 would serve as an insurance policy in case significant OTC capacity becomes unavailable in 2018. This coupled by delays in development of new resources that were authorized under the LTPP could pose significant capacity shortfalls in CAISO beginning 2018. This new project will make more out of state capacity available to CAISO thereby helping mitigate the risk of Stage 1 & 3 Emergencies.</p> <p><u>Conclusion</u> LS Power encourages CAISO to seek board approval of the Harry Allen-Eldorado 500 kV Transmission Line as an economic project given the benefits demonstrated by CAISO's studies and the additional benefits identified above. In addition, LS Power encourages CAISO to recognize the benefits to ratepayers of an earlier in-service date in any solicitation conducted for the project.</p>	<p>However schedule could be one of the key selection factors along with cost containment.</p> <p>The ISO is using a real discount rate ranging from 5% to 7%.</p>

No	Comment Submitted	ISO Response
4	Pacific Gas & Electric Submitted by: Justin Bieber	
4a	<u>Harry Allen – Eldorado Economic Benefit Analysis</u> PG&E shares similar concerns as other stakeholders that the assumed capacity benefit may be lower than assumed in the benefit analysis. The BCR ratio between 1.063 and 1.143 and capacity benefits that account for more than half of total gross benefits make this economic analysis very sensitive to that capacity value assumption.	Please see ISO responses to similar comments above

No	Comment Submitted	ISO Response
5	Southern California Edison Submitted by: Karen Shea	
5a	<u>Comments Regarding the Harry Allen-EI Dorado Analysis</u> SCE is continuing to evaluate the additional information regarding the Harry Allen-EI Dorado analysis that was presented at the CAISO's November 19-20 stakeholder meeting. SCE would appreciate the CAISO's response to the following: <ol style="list-style-type: none"> Slide #10 of the Day 2 Harry Allen-Eldorado presentation says that there have been "Small updates to CT value, dollar year, etc.". SCE requests the CAISO to provide a description of those updates, particularly regarding assumptions relating to the cost of new generation capacity in California, including any differences from what was described in the 2013-14 approved transmission plan. Have any changes been made to the derate assumptions that were described in the CAISO's 2013-14 approved transmission plan? If so, please describe. SCE observes this is now the second inter-regional project that will result in CAISO allocating all costs to California. We encourage the CAISO to move forward with the Order 1000 inter-regional planning process to ensure inter-regional cost allocation as soon as practical on any similar future projects.	Please see the Supplemental Assessment. The ISO has assumed that due to high ambient temperatures expected during resource shortage conditions, the combustion turbine maximum generation capability will be derated by 5%. It is assumed that the resource shortage is in California and the temperatures in California are 1 in 10 heat wave conditions. It is not assumed that Nevada and the Desert Southwest are experiencing abnormally high temperatures. The ISO is proceeding with its Order 1000 inter-regional planning process in coordination with neighboring systems as needed. In any event, inter-regional cost allocation is based on the identification of material ratepayer benefits for the areas that would also drive those areas to support a project through funding. The ISO analysis focused on California ratepayer benefits. Benefits to neighboring regions have not been quantified through the analysis or consultation to date. Moreover, waiting for FERC Order 1000 inter-regional coordination issues to be resolved could take years and would forego the identified benefits for California ratepayers, unnecessarily.