City and County of San Francisco Comments on CAISO 2012-13 Transmission Plan

The City and County of San Francisco (City) appreciates the opportunity to comment on the proposed CAISO 2012-13 Transmission Plan. The City has concerns about two projects that could adversely impact the City's 230 kV Warnerville transformer and the City's associated 230 kV/115 kV transmission system from Hetch Hetchy to Newark: 1) a policy driven project in the PG&E service area: the Warnerville – Bellota 230kV Line Reconductoring project, and 2) a reliability driven project in the PG&E service area: Series Reactor on Warnerville-Wilson 230 kV Line. The City urges the CAISO to delay approval of these two projects until the City and the CAISO have resolved issues related to potential impacts of these two projects on the City's transmission facilities.

In addition:

- The City supports the reconfiguration of the Potrero Substation and the dead-bus energization of the Trans Bay Cable as two relatively inexpensive projects that can improve the reliability of the San Francisco peninsula in a relatively short time-frame.

- The CAISO has indicated that it will undertake a long-term assessment of the San Francisco peninsula electric system to explore alternatives to provide for robust long-term reliability. The City supports this assessment and looks forward to working on the assessment with the CAISO as a critical stakeholder.

- The CAISO should address outstanding reliability issues that affect San Francisco in time for consideration of those issues in the 2013-2014 transmission planning process.

- The City remains concerned about the exponential growth of the High Voltage Transmission Access Charge (TAC) which has been fueled in part by approval and construction of transmission facilities that have not been adequately justified and also by unduly stringent CAISO deliverability criteria:
  - The City opposes including the Coolwater-Lugo and the West of Devers projects in the models supporting the 2012-2013 CAISO Transmission Plan; these projects account for $1.2 billion dollars, are not needed for reliability and have not been shown to be cost-effective.

- The City opposes the CAISO's designation of projects as policy driven without a cost-benefit analysis, based on Resource Adequacy needs rather than Renewable Portfolio Standard (RPS) needs. For example, without a benefit-cost assessment, it is premature for the CAISO to designate as policy driven the Lugo – Eldorado 500 kV Line Re-route and the Warnerville – Bellota 230kV Line Reconductoring projects, costing respectively $40M and $28M.

I. The CAISO Should Delay Approval of Projects that Could Adversely Affect the City's Transmission Facilities Until Issues Related to Potential Impacts are Resolved.

The City is concerned about two projects included in the CAISO 2012-2013 Transmission Plan that could adversely affect City facilities: a policy driven project in the PG&E service area: the Warnerville – Bellota 230kV Line Reconductoring project; and a reliability driven project in the PG&E service area: Series Reactor on Warnerville-Wilson 230 kV Line. The CAISO contends that these additions will not adversely impact the City's Warnerville substation and its Hetch Hetchy- Newark 230 kV/115 kV transmission system. However, it has not supplied the City with the analyses to substantiate this claim. The City requires additional information to confirm this assessment. In response to a recent City request for more information, the CAISO provided the City a very brief verbal description of its analyses.

Since the CAISO has not provided the City its detailed study results on the potential impacts to the City system, the City must itself verify that there will be no adverse impacts on its facilities, including if necessary, running additional independent studies under alternative City system representations. The City is interested in working cooperatively with the CAISO to fully and accurately determine the potential impacts of the proposed projects and, if adverse impacts are identified, develop appropriate mitigation measures. In the meantime, however, the CAISO should delay the approval of the proposed projects until

the City and the CAISO have resolved issues related to the potential impact of these two projects on the City's transmission facilities.

II. The City Supports the Reconfiguration of the Potrero Substation and the Dead-Bus Energization of the Trans Bay Cable.

The CAISO is proposing approval of two minor projects that would improve the reliability in the San Francisco peninsula. These projects are 1) the Potrero 115 kV Bus Upgrade: a reconfiguration of the Potrero Substation, and 2) and the Trans Bay Cable Deadbus Energization project: installation of back-up generation at Trans Bay Cable's Potrero Converter station that would allow the Trans Bay Cable to assist in re-energizing San Francisco in the event of a San Francisco wide black-out. The City supports both of these projects as relatively inexpensive projects that can improve San Francisco peninsula reliability in a relatively short time-frame. As discussed below, however, approval of these projects does not eliminate the need for a longer-term study of San Francisco peninsula reliability needs.

III. The City Supports a Long-Term Assessment of the Reliability Needs of the San Francisco Peninsula.

In 2009, the City proposed the Newark –Alameda Point-Potrero project to improve the reliability of the San Francisco peninsula transmission system by establishing a transmission connection to the East Bay and minimizing San Francisco's reliance on the Peninsula transmission lines and the Martin substation. Last year, PG&E proposed a Moraga-Potrero 230kV project with a similar objective. The CAISO 2012-2013 Transmission Plan approves only the modest Potrero 115 kV Bus Upgrade and Trans Bay Cable Dead Bus Energization projects. While the City recognizes that the Potrero 115 kV Bus Upgrade and the Trans Bay Cable Deadbus Energization projects address reliability

needs in the near term, a longer term assessment is needed to explore alternatives to provide for robust reliability in the San Francisco Bay Area over the long term.

The CAISO has proposed to undertake a long-term assessment of the San Francisco peninsula as part of the 2013-2014 transmission planning process. The City strongly supports such an assessment and intends to participate actively in the process. The City urges the CAISO to work closely with the City as it undertakes the assessment as the City is a critical stakeholder.

IV. The 2012-2013 CAISO Transmission Plan Should Address Two Outstanding Reliability Issues that affect San Francisco.

The 2012-2013 CAISO Transmission Plan fails to address two reliability issues the City has previously raised with the CAISO as set forth below. The CAISO should follow up on these issues and report back to the City and other stakeholders in time for consideration of these issues in the 2013-2014 CAISO transmission planning process.

- In the CAISO reliability assessments of both 2011-2012 and 2012-2013, the CAISO identified a Category C overload on the Potrero-Larkin 115kV cable. No solution has been proposed to this problem. The CAISO should explore and report on solutions to this problem.

- The 2012-2013 CAISO assessment identified Trans Bay Cable run-back schemes as a solution for several potential overloads. The CAISO should provide more detailed information on any existing TBC run-back schemes, any planned TBC run-back schemes and any proposed expansion of existing TBC run-back schemes.

V. The CAISO Must Stem the Unjustified and Exponential Growth of the TAC, Rejecting Projects that Have Not Been Shown to be Justified and Revising its Unduly Stringent CAISO Deliverability Criteria.

As the City has pointed out repeatedly, the TAC is rising exponentially. The TAC has gone up from $1.40/MWh in 2001 to $8.70/MWh in 2012. The CAISO recently updated its TAC forecast, which now indicates the current TAC rate will go up further to $13/MWh in 2022 taking into account the projects approved in the 2012-13 transmission

planning cycle,[1] which means a TAC increase of more than an order of magnitude in only two decades. While some of the TAC increases result from projects that are needed to maintain reliability or support the RPS, others projects that contribute to the increase are not adequately justified. The City has stressed to the CAISO repeatedly two problems, which persist in the 2012-2013 CAISO Transmission Plan.

First, the CAISO includes in its modeling cases transmission projects that 1) have not been shown to be needed for reliability, 2) have not been shown to be cost-effective, and 3) have not received a certificate of public convenience and necessity (CPCN). Two key such projects are the Coolwater-Lugo and the West of Devers projects that together are projected to cost ratepayers $1.2 billion (if current estimates hold). As the City has previously noted, identification of network upgrade projects in the context of generator interconnections requires more robust analysis by the CAISO to ensure that projects that will ultimately be paid for by ratepayers offer ratepayers commensurate benefits.

Second, the CAISO's deliverability criteria are unduly stringent and improperly assume that all renewable projects should be fully deliverable, even though the RPS requirements relate purely to energy and not all RPS project developers seek full deliverability status. In assuming that all renewable projects should be fully deliverable, the CAISO is in essence building transmission to allow renewables to provide Resource Adequacy without undertaking a cost-benefit analysis to demonstrate that this approach is economically justified. There is no state policy that renewable projects should provide Resource Adequacy irrespective of economics. Before designating projects as policy driven solely to allow renewable projects to satisfy the Resource Adequacy needs, the CAISO

[1] "Transmission Program Impact on High Voltage TAC Preliminary Results" presented by Neil Millar Executive Director - Infrastructure Development, CAISO, at the Draft 2012/2013 ISO Transmission Plan Stakeholder Meeting on February 11, 2013.

should undertake a cost-benefit analysis to show that the proposed projects are economic. For example, the City opposes CAISO approval of the Lugo – Eldorado 500 kV Line Re-route and the Warnerville – Bellota 230kV Line Reconductoring projects, as "policy-driven" transmission projects without an economic justification.

If you have any questions concerning these comments, please contact Barry Flynn (888-634-7516 and brflynn@flynnrci.com) or Meg Meal (MMeal@sfwater.org).