

From: [Mitchell, Lori](#)
To: [Cindy Muller](#); pauldunne@google.com
Cc: [O'Connor, Kevin](#)
Subject: Fw: Service Option Risks and Potential Mitigations
Date: Thursday, March 12, 2020 5:00:35 PM
Attachments: [Service Option Risks and Mitigations v1.docx](#)

Hi Cindy & Paul,

Attached are the reliability considerations from Flynn that we discussed yesterday.

Lori

From: Doug Boccignone <dougbocc@flynnrci.com>
Sent: Thursday, March 12, 2020 10:43 AM
To: Mitchell, Lori <Lori.Mitchell@sanjoseca.gov>; O'Connor, Kevin <Kevin.Oconnor@sanjoseca.gov>
Cc: Barry Flynn <brflynn@flynnrci.com>; Mike Keller <mikekeller@flynnrci.com>
Subject: Service Option Risks and Potential Mitigations

[External Email]

Lori and Kevin,
Attached is a table summarizing our high level view of the potential outage risks and potential mitigation measures for the three main service options. We will work on a more detailed description of the potential mitigation measures next week.

Let us know if you have any questions.

Doug

Doug Boccignone
Principal
Flynn Resource Consultants Inc.
5440 Edgeview Drive
Discovery Bay, CA 94505
888-634-7509 (phone and fax)
dougbocc@flynnrci.com

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Option	PGE Option 2	PGE Option 3	CSJ Alt 2A
Transmission Source	El Patio–Sta A 115 kV line	Looped El Patio–Sta A, Sta B–Sta A 115 kV lines	Tapped El Patio–Sta A, Sta B–Sta A 115 kV lines
Distribution Source	Single 45 MVA xfrmr	Dual 45 MVA xfrmrs	Dual 45 MVA xfrmrs
Transmission Risk Factors (single contingency)	115 kV line outage, xfrmr outage		115 kV line outage, single xfrmr
Exposure(s)	100% load loss for hours, weeks, months;		50% load loss for seconds
Potential Mitigations at Substation	Battery backup and onsite generation		Conventional protection of high-side source and low-side load between xfrmrs; battery backup at substation for 50% of load
Comments	Battery backup/onsite generation mitigation measures may be desirable also to address potential distribution system exposures, and for PSPS resiliency		Battery backup/onsite generation mitigation measures may be desirable also to address potential distribution system exposures, and for PSPS resiliency