Low-Rigor Industry Standard Practice Study			
Baseline	**EE Measure**	**Application**	**Customer Segment**
Control or Re-Circulation Valve with Soft Start	VFDs	Oil Pipeline Pump Motors 1,000-3,000 HP	Midstream Oil
Summary			
ISP Status	The Industry Standard Practice (ISP) or baseline control mechanism for midstream oil pipeline pump motors 1,000-3,000 HP @ 4,180 V is a a control valve or re-circulation valve plus a “soft” start device.		
Rationale	The above configuration would meet the requirements of a reduced voltage start if required by the utility. The initial cost for a VFD and the required set-up equipment for this application is prohibitively high. Company management regularly turns down facility engineers proposals to include VFDs in favor of lower cost project alternatives that meet the process need and educed voltage start requirement.		
Background	This ISP considers the midstream oil segment process pertaining to the pipeline transport of crude oil as opposed to upstream (extraction or separation) or downstream (refineries) segments. PG&E launched this ISP to confirm eligibility of several energy efficiency sales leads with oil pipeline customers for VFDs on the motor systems that will be used to pump crude oil through pipelines from pumping stations to storage tanks.		
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Contacts	This ISP relied on information from California midstream oil segment industry stakeholders.		
Oil Pipeline Cutomers	4		
Supplier/Distributors	5		
Engineering Firms	4		
California Utility Petroleum EE Sales and Engineers	4		
Energy Division	2		
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