New Generator Connection Policy

Comparison Criteria

Criterion	Advance Congestion Cost Mitigation	No Grandfathering
 Locational price/cost signals Ensure that policy allows generators to pay and receive costs that accurately reflect market conditions at their location. 	 Generators see all true price signals that it sees under current model, plus generator sees signal of cost to mitigate significant local congestion that result from the siting decision. Open to future enhancements in locational signals. 	 All generators at a given location receive the same price signals regardless of in- service date Inter- and intra-zonal signals, along with RMR signals, would still apply and would continue to be accurate zonal price signals No undermining of existing congestion management protocols and CAISO/PX market underpinnings
 Avoid disincentives to developing new generation Provide ex-ante price certainty Avoid barriers to market entry Consider scope of risk and certainty of financial hedge 	 Certainty that output can be delivered out of the local area into the zone. Substantially reduces a significant real- world barrier to entry by reducing scope of risk is to that associated with formation of zone with no player greater than 20%. Definition of local congestion does not 	 Does not discriminate against new generators and give preferential treatment to existing or "first to market" generators; provides level playing field for all Generation market entry enhanced through provision of choice (of price certainty through payment for congestion mitigation)
	• Definition of local congestion does not create significant barriers to market entry by new generation. Instead, reduces problem of bid collusion in mini-zones.	• Does not create barriers to market entry by new generators; does not insulate existing and "first to market" generators from competition with new generators for scarce

Attachment E

• In return for siting decision and, if needed, payment for system reinforcements, generator receives financial hedge against all congestion within the local area.	transmission
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------

 Avoid exercise of market power Minimize opportunities for any generator to unfairly exercise market power or implement gaming strategies. 	 By directly assigning congestion in local areas, minimizes opportunity for generators to game adjustment bids. By minimizing the creation of mini-zones, reduces problem of "price leader" (collusive) bidding for congestion services. 	• Avoids exercise of market power due to preferential treatment given to existing and "first to market" generators (i.e., does not grant preferential transmission rights to such generators)
Send signals that encourage efficient use and expansion of the transmission grid	 Provides strong siting signals, precisely <u>where</u> they are needed and <u>when</u> they are needed. Generator receives advance cost signal to site in areas with adequate transmission rather than in areas where extensive reinforcements would be required. Holds new generator responsible for mitigating congestion it would cause by its siting decision. Generator and PTO receive appropriate signals to expand the grid <u>during</u> the siting process — when the decisions are made, and before congestion actually occurs. Grid expansion to avoid local congestion is not mandatory— the new generator's responsibility is only to mitigate the local congestion it would create, by whatever means is more effective. Makes best use of available transmission capacity by steering generators toward sites with capacity and away from sites 	 Congestion price signals not skewed (i.e., not held stable for existing and "first to market" generators, not artificially magnified for new generators), thereby enhancing efficiency and expansion of the generation & transmission system

which require upgrades.	
• Through pricing signals, minimizes need for transmission upgrades, reducing environmental impacts.	
• The environmental impacts of transmission reinforcements necessitated by a generator's siting decision are considered during the generator certification process—rather than after the generator is in service.	
• Reduces problem of "landlocked" generation, which makes poor use of the grid. Consequently, more generation is available to serve loads outside the local area.	

Rely on competitive markets • Provide choices to the marketplace Encourage consistency with and improvement to the ISO Market Design	 Loads have more choice in generators for energy and ancillary services. Low or medium cost generation will not be constrained out of the market by local area congestion. Generators have the choice to finance new facilities, purchase redispatch from other generators or DSM, and self-curtail in order to address the local congestion impacts which they would create. Generators compete by price within large zones (e.g., NP15). The least economic unit in the large zone is the marginal unit (rather than the least-economic unit in a new mini-zone). Result is the correct competitive outcome: the truly inefficient units are forced out, not those which happen to be caught in a new mini-zone. Retains <u>all</u> of the workable aspects of the present market design. Addresses deficiencies in existing market design by reducing potential for situations in which practical outcomes would be gaming or abuse of market power. Such situations include: mini-zones and pockets of intra-zonal congestion in which only a few generators have the power to mitigate congestion. 	 Provides choice to generators whether to accept the day-ahead and hour-ahead congestion management risk/cost, or to make a transmission investment to partially or fully hedge this risk/cost Consistent with the marginal cost-based precepts that form the market-based underpinnings of the CAISO & PX
Equity / treatment of existing and new/future generators / vintaging / grandfathering	• Same treatment for new generators as for existing generators: existing generators were integrated with the system at the time of siting to avoid local area congestion. New generators	• Treats all generators the same, regardless of in-service date (i.e., provides comparable, non-discriminatory trans-

• Is it acceptable to place requirements on new/future generators that are not placed on existing generators?	 would be similarly integrated (or, at the generators' option, bear the congestion cost/risk). Equitable: all generators pay for the local impacts that they create, and all generators are given some protection from impacts of future generators. Only a new generator is capable of choosing an alternative location, if appropriate. 	 mission service) Does not allow the grandfathering of transmission rights to take place Provides a level playing field for all generators to compete
	• Treats future generators the same as existing generators once they are built and become existing generators. Does not distinguish among generators by date of operation.	

 Cost causation Appropriately assign market costs to factors that cause them 	• New generator would be assigned responsibility for mitigating congestion it causes by its siting decision.	• Congestion management cost causation principles are upheld, in that all generators that contribute towards transmission scarcity (i.e., congestion) compete (through price alone) equally for that scarce transmission
 Credit for System Benefits Compensate generators fairly for using generation to solve transmission problems Compensate generators for locational (siting) benefits 	 Detailed proposal for determining those impacts and facilities for which the new generator is responsible, and the rights (including system benefits) to which the generator is thereby entitled Provides reimbursement to the generator up to the full cost of the system reinforcements it paid for. Redirects the locational signal for system reinforcements to the PTO if the PTO relies upon the generation project to serve more users than it otherwise could. 	• Both approaches agree that new generators that make a transmission investment, beyond that required for reliability reasons, should receive appropriate recognition for such investment
 Ease of implementation/administration If there is a difference in implementing and/or administering one option relative to the other, is the difference worth the difference in effect? 	 Results in fewer constraints for ISO to manage in operations. Requires less ISO resources. Creation of fewer mini-zones in which there is no real competition results in less administrative burden to deal with gamed bids. Uses existing planning methods and processes (i.e., interconnection study and annual planning assessment processes) with minor, straight-forward modifications, which the proposal 	 Easy to implement – existing congestion management protocols are unchanged No litigious study assumptions required to implement

describes in detail.	