California Independent   System
Operator Corporation
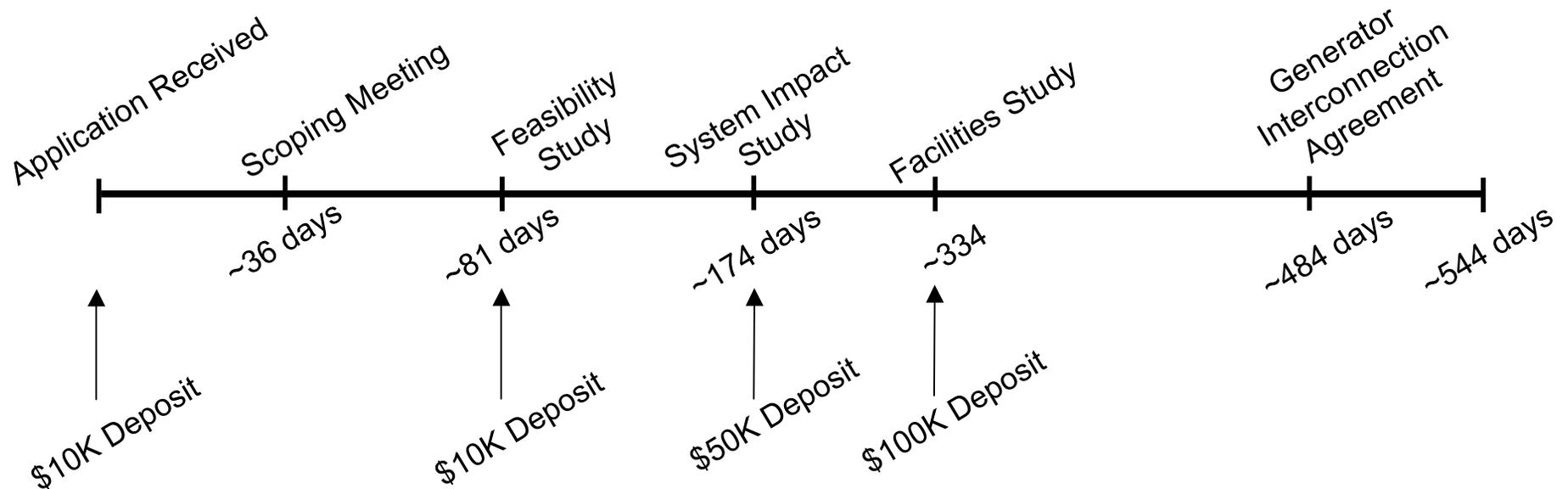
California Energy Commission
Credit Policies Workshop

PPA and the Interconnection Process

Presented by Tom French
June 27, 2006

Process and timing to determine cost - Interconnection Studies

Application Received

Scoping Meeting

Feasibility Study

System Impact Study

Facilities Study

Generator Interconnection Agreement

~36 days

~81 days

~174 days

~334

~484 days

~544 days

$10K Deposit

$10K Deposit

$50K Deposit

$100K Deposit

- The timeline above is an approximation based on maximum tariff time frames and they are dependent upon participant response times. Time can be shorter if response times are shorter than the tariff limit. The time can be impacted by requested optional studies and restudies.

- Customer pays actual cost of studies

- Non-binding good faith estimate of direct interconnection facility and network upgrade cost and cost responsibility are provided in the Feasibility Study and System Impact Study

- Firm costs are typically determined after the Facilities Study is complete and a Generator Interconnection Agreement signed
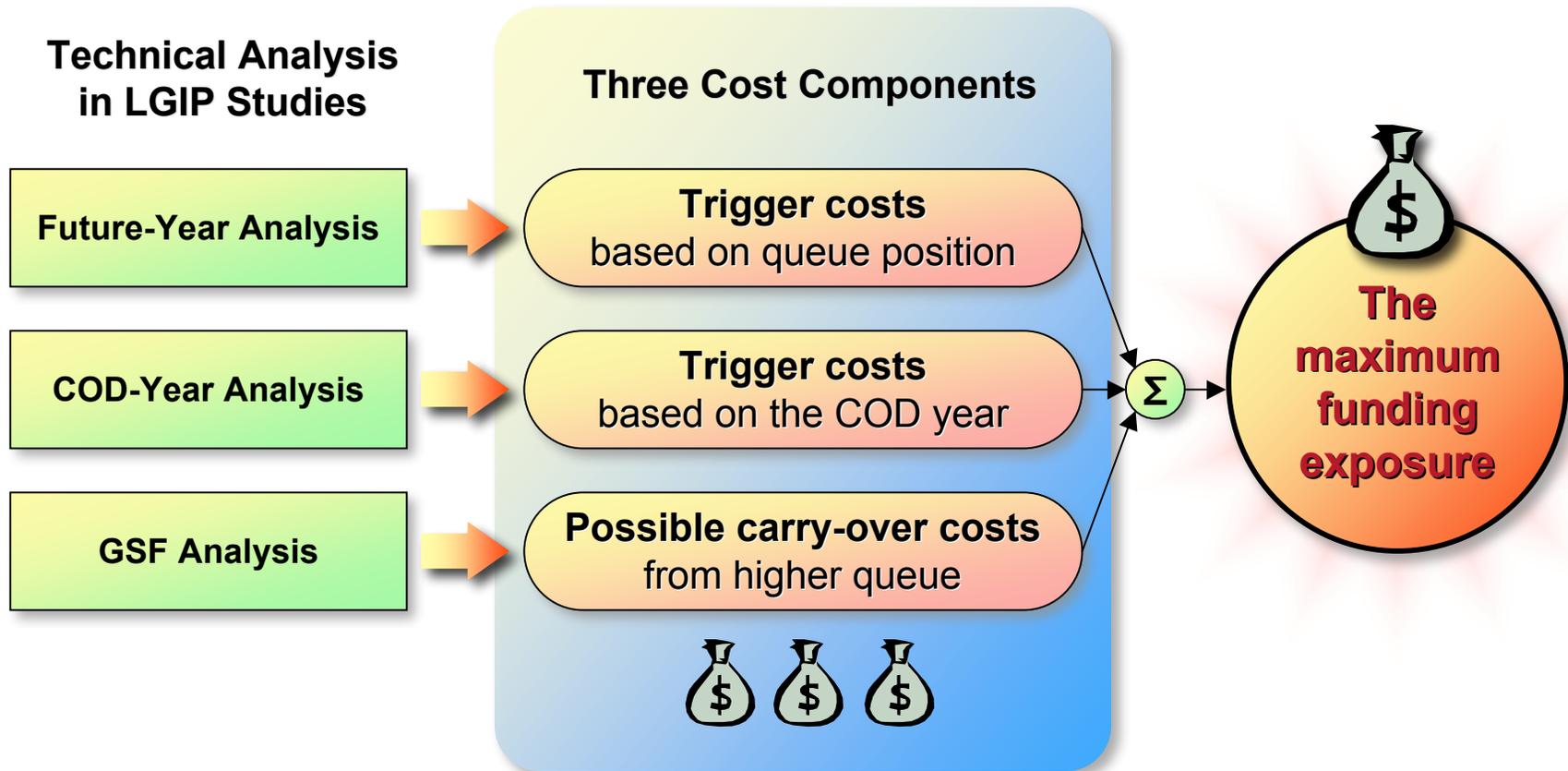
Interconnection Costs

Non- Refundable

- **Interconnection studies, typically $100k to $250k**
- **Direct interconnection facilities**

Refundable Over 5 Years

- **Required reliability network upgrades**
- **Delivery network upgrades**

Generator Interconnection Costs and Risks

Determine the "Maximum Funding Exposure"?

FERC Order on Rehearing, Order No. 2003-A, March 5, 2004

"This is simply a business risk that Interconnection Customers must face; the Commission cannot protect them from all uncertainty, **we are directing the Transmission Provider to provide an estimate of the Interconnection Customer's maximum possible funding exposure**, if higher queued generating facilities drop out when the Transmission Provider tenders the draft LGIA."

**If the dollar amount for
the "maximum funding exposure" is really needed,
an optional study can be performed
using either of the following two methods.**

See the next slide …

PPA /Project Economics are Sometimes Estimated Before all Interconnection Costs are Known

Interconnection Costs can Change Over Time

Some of these costs exposures may or may not materialize because they are dependent on the actions and decisions of other developers over time.

This issue exists whether a standard queuing process is used or whether a clustering process is used.

Questions ?