California ISO
Your Link to Power

California Independent
System Operator Corporation

Long-Term Financial Transmission Rights

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Ockham's Razor and Long-Term FTRs

- **14th Century English logician and Franciscan friar William of Ockham stated**
  - "All things being equal, the simplest solution tends to be the best one"
- **Apply this principle to Long-Term FTRs**

Goals of LT-FTR Process

- **FERC requirements on LT-FTR process**
  - Firm MW of LT-FTR capacity
  - Fully fund LT-FTR
  - Rapid implementation—By MTRU Release 1
- **Many stakeholders have expressed a preference for a “go slow” approach to LMP implementation**
  - Small initial release of LT-FTRs
  - Equitable allocation of LT-FTRs to entities that paid for transmission network
- **ISO goals**
  - Merchandising surplus (difference between amount buyers pay and sellers receive) is sufficient to pay its FTR obligations
    - Issue as many FTRs as possible subject to this constraint
  - Ownership of FTRs does not degrade market efficiency and system reliability
  - Stimulate secondary market trading of FTRs

Balancing Competing Goals

- **Build on existing CRR allocation process to reduce cost all market participants must pay to comply with FERC order**
- **Limited initial release to address "go slow" desires of stakeholders**
- **Allocate to load-serving entities (LSEs) to address market efficiency and reliability concerns of ISO**
- **Simple allocation rule that addresses equity concerns between large and small load-serving entities (LSEs)**
- **Provide incentives for LT-FTRs requested to be along major competitive transmission interfaces**
  - Address market efficiency and system reliability concerns

Balancing Competing Goals

- **Issue a single type of LT-FTR to simplify allocation process**
  – Seasonal FTR needs of market participants can be met through annual allocation and secondary market
- **Issue N-year obligation LT-FTRs at start of process**
  – Eliminate annual option to renew LT-FTR each year
  – 1 MW LT-FTR from source A to sink B is obligation to receive or pay each hour [p(B) – P(A)] over ten year period
    - Market participant can only be released from their obligation by finding a willing buyer to purchase it
  – N-year obligation emphasizes need to focus LT-FTR allocation process on major transmission interfaces and pre-existing long-term relationship between generation unit owners and LSEs

Balancing Competing Goals

- **Downside of using existing long-term supply arrangements to give priority in allocation process for ten-year product**
  - Load served by LSEs currently using valuable transmission inferface continue to use it for 10 years despite the fact that all loads pay same $/MWh transmission access charge
- **Inequity in initial access to transmission network persists into future**
  - Double burden on loads served by smaller LSEs
    - Didn’t get access to valuable transmission paths in past
    - Don’t get most valuable LT-FTRs in the future

Balancing Competing Goals

- **Downside of using planned long-term supply arrangements to give priority in allocation process for a ten-year product**
  - Provides incentives for LSEs to source long-term supply arrangements from low-priced locations that meet ISO's deliverability requirements and use FTRs to refund congestion costs
    - Dulls incentive for suppliers to build new generation capacity at locations with relatively high LMP prices
  - Gives preference in LT-FTR allocation process to LSEs most able to negotiate favorable long-term supply arrangements
    - Equity concerns would say the opposite
  - Requires that ISO verify which planned long-term supply arrangement are worthy of LT-FTRs
    - Very expensive and contentious process

Balancing Competing Goals

- **If the ISO is going to promise full funding of LT-FTRs**
  - Backstop mechanism to ensure full funding should be in proposal
  - Full funding should also apply to FTRs issued in annual allocation process
    - Reduces cost to market participants of buying and selling one-year FTRs and unbundling LT-FTRs
- **Similar logic applies to firmness of MWs of FTR**
  - Both LT-FTR and annual FTRs should have firm MWs
- **Small initial release of LT-FTRs and annual allocation process should limit risk of revenue shortfall**
  - ISO should face some cost if there is a revenue shortfall

Proposed Simplified Mechanism

- **Run Tier Zero Allocation Process**
  - For over-subscribed FTRs, pro-rata allocate to LSEs requesting available FTR capacity based on TAC-weighted share
  - Example—Three LSEs request more than capacity available from A to B
    - Each receives their share of total TAC paid among requesting LSEs on that path
- **Following Tier Zero Allocation**
  - Allow all market participants to designate up to 20 percent of CRRs as 10-year obligations
  - Market participant can only get rid of obligations by selling it in secondary market
- **If ISO wants to ensure additional 10-year capacity available each year**
  - Use staggered release where at the end of first-year Tier Zero allocation only 18 percent can be designated as 10-year obligation
  - Each year after can designate 2 percent of capacity in annual Tier Zero allocation as 10 year obligation from that date forward
- **Fully fund and ensure MW firmness of both 10-year and annual FTRs using TAC as backstop**
  - Clearly designate circumstances when force majure events reduce MWs

Promoting Secondary Market for FTRs

- **Any market participate could offer to sell short-term or long-term TRs**
  - Guarantee payment stream P(sink) – P(source) for duration desired by buyer of transmission right
- **Privately issued FTRs and sales of portions of existing LT-FTRs and annual FTRs can be used to meet specific hedging needs**
  - ISO cannot give all market participants the exact hedge they want
- **Secondary market transactions can allow market participants to purchase FTRs or portions of FTRs from other market participants**
  - Can obtain more desirable FTR by paying a market price
- **Existence of 10-year obligation provides incentive for participation in secondary market**

Why Make Simplified Proposal More Complex?

- **ISO should set high standard for increasing complexity of simplified allocation process**
- **Addresses equity concerns**
  - All loads expect to get same value per MW of CRRs issued
  - All loads pay TAC on same $/MWh basis
- **Addresses energy market efficiency concerns**
  - Preserves incentives for suppliers to locate at high-priced locations
  - Limits incentives for LSEs to use FTRs to exercise local market power
    - All LSEs can get access to TAC-weighted share of any CRR
- **LSEs can hedge long-term congestion risk**
  - Purchase additional FTRs in secondary market or obtain in annual allocation