



FERC Order 1000: A Solution Looking for a Problem?

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Major Components of Order 1000

- **Transmission planning regions required to self-identify**
- **Principles for required:**
 - **Intra-regional cost allocation**
 - **Intra-regional planning processes**
 - **Inter-regional cost allocation and planning coordination**
- **Stakeholder participation**
- **Removed federal right of first refusal**
 - **Competition for construction of certain new facilities**

Concerns with Order 1000

- **Group of concerned utilities formed the Coalition for Fair Transmission Policy (CFTP)**
- **CFTP argued:**
 - **Transmission needs to be a bottom-up process based on the needs of individual load-serving entities – not top- down fiats (State IRP can't be pre-empted)**
 - **Cost allocation must be roughly proportional to real (and measurable) economic and reliability benefits to customers**
 - **Costs for public policy projects should only be allocated to LSEs having to meet the public policy requirement(s) contributing to the need**
 - **FERC can't assign costs absent a customer or contractual relationship**

History

- **Order 1000 issued July 21, 2011**
- **About 30 parties requested rehearing**
- **Order was appealed to DC Circuit**
- **All appeals were denied in August 2014**
- **Implementation continuing – all regions have approved compliance plans after 3 or 4 attempts**

Is it Working?

- Among original stated purposes was to give more clarity and certainty to new transmission users by having an ex-ante methodology to allocate costs for new projects
- Commission believed that litigation would be reduced
- Guiding principle of Order 1000: “Cost Allocation Roughly Commensurate with Benefits” was extracted from Court Decisions (*Illinois Commerce Commission v. FERC*, 576 F.3d 470, 476 (7th Cir. 2009))
- But “benefits” was never defined – left to individual RTOs
- Result has been wide variance in compliance plans – from California which socializes all transmission costs on basis of the “benefits” of all new transmission to the State, to PJM which has specific quantitative methodologies for various types of projects

Case Study – MISO MVP Projects

- In July 2010, MISO submitted request for approval of “MVP” or “Multi-Value Projects” for Commission approval of planned cost allocation
- Allocation to be postage stamp to all load
- Idea behind MVP was that as a “basket” of projects with multiple benefits, costs would be allocated roughly proportional to benefits over the long-term
- No single project, however, had to meet the FERC “roughly proportional” test
- FERC conditionally approved MVP filing in December 2010

MISO MVP Projects

- **To qualify for postage-stamp pricing, MVP projects must satisfy one of three criteria:**
 - they are driven by the need to satisfy a documented public policy law or mandate;
 - they provide multiple types of economic value across multiple pricing zones; or,
 - they comply with reliability standards and provide economic value across multiple pricing zones.
- **FERC's approval anchored substantially in "broad state and stakeholder support", rather than meeting Order 1000 Principles**
- **Problems:**
 - Michigan has in-state only renewable requirement
 - Indiana has no renewable requirement
 - Other states have RPS but different targets

MISO MVP Projects

- **Primary purpose of most MVP projects is to move renewables – particularly Midwest wind to load centers**
- **MISO's filings did not contain cost-benefit information for individual projects, utilities, pricing zones or states**
- **Example: Michigan and its' in-state renewable requirement**
 - **Michigan (20 percent of MISO load) would be required to pay 20 percent of \$16 billion for transmission lines across 13 Midwestern states**
 - **Most of the projects deliver virtually no benefits to Michigan consumers**

MISO MVP Projects

- MVP plan makes assumptions about how states will meet their renewable portfolio standards (DG ignored)
- Even if basket of projects balances costs and benefits, no guarantee (or even likelihood) that all projects will get built, as public policy, demand, technology, economics changes
- First project benefitted only Michigan

Case Study – TRTP and Chino Hills, CA

- **Tehachapi Renewable Transmission Project (TRTP) being built to provide 4500 MW of transfer capability for renewable projects expected to be built in remote areas of Kern County, CA - \$3.2 billion project**
- **Construction approved by CA PUC before either generation projects or customers were identified**
- **CA PUC/ISO policy is to socialize costs of transmission to all customers in California**
- **In this case, not even possible to identify beneficiaries or non-beneficiaries, but – it gets worse**

TRTP and Chino Hills, CA (*cont.*)

- Construction began on Segment 8, which was to replace existing single-circuit 20 kV line with a double-circuit 500 kV line
- As construction of Segment 8 proceeded, Chino Hills, a wealthy community in San Bernardino County, raised strenuous objections to towers being built over 3.5 mile segment through city
- Chino Hills filed petition with California PUC and court challenges to have segment placed underground

TRTP and Chino Hills, CA (*cont.*)

- **SCE objected to petition, citing schedule delays and \$400-\$700 million (25 – 33% of total budget) in additional costs which would be paid for by all (non-benefitting) CA ISO ratepayers under tariff**
- **SCE also concerned about precedent**
- **On July 11, 2013, CA PUC granted Chino Hills petition in 3-2 vote, also ordering removal of existing towers**
- **PUC estimated the cost at \$224 million and stated that “the burden imposed by the overhead lines was unfair and contrary to community values”**

TRTP and Chino Hills, CA (*cont.*)

- “We conclude here, on balance, that fundamental fairness requires that the costs of undergrounding should be spread among all CAISO ratepayers, at a minor cost to each, since the completed TRTP will benefit all.” - CPUC
- SCE sought and received approval from FERC to recover stranded costs of already constructed transmission towers
- Under CA ISO Order 1000 cost allocation plan, costs of undergrounding and stranded cost recovery will be added to postage stamp rate

TRTP and Chino Hills – Precedent?

- On November 24, 2014, City of Ontario filed petition to underground the portion of Segment 8 through their city calling their situation worse than Chino Hills
- “Ontario officials have raised the specter of racism and ethnic prejudice in their effort to convince the [PUC] to order SCE to scrap its current plans ... and bury ... cable ...” – San Bernardino Sentinel, 12/31/14
- On March 15, 2014, CPUC denied Ontario’s petition on basis that it would delay the project five years with significantly increased costs to ratepayers
- Ontario has vowed to fight on
- What will FERC do?

Case Study – Artificial Island, NJ

- “Artificial Island” is an island in the Delaware River with two nuclear plants owned by PSEG - Salem and Hope Creek
- Output from both plants limited in certain times
- PJM recommended transmission solution and conducted bids
- Parallel case involving Linden VFT, a merchant transmission company, and Bergen-Linden Corridor Project
- For cost allocation, PJM relied on DFAX methodology looking at power flows (50%) and postage stamp (50%) for some facilities and 100% DFAX for others based on Order 1000 filing – for both projects

Artificial Island, NJ (*cont.*)

- Application of methodologies resulted in over 90% of cost allocation to Delmarva for Artificial Island Project – estimated rate increase for Delaware customers of 30 percent
- Application to Bergen-Linden Project resulted in additional cost allocations to Linden VFT and Con Edison
- Numerous parties, including Maryland and Delaware Commissions protested Artificial Island cost allocation
- Linden VFT and Con Ed protested Bergen-Linden Cost Allocation
- Meanwhile, competitive selection process for building Artificial Island projects was contentious and resulted in additional litigation

Artificial Island, NJ (*cont.*)

- PJM recognized that there were valid concerns resulting from application of DFAX methodology to the Artificial Island project but continued to support such cost allocation for the Bergen-Linden Project
- On November 24, 2015, found that the proposed tariffs (for both Artificial island and Linden VFT) were not shown to be just and reasonable and set up a technical conference in the complaint proceedings
- Finding suggests that cost allocation is not roughly commensurate with benefits based on Order 1000 methodology
- Thus, FERC will have to decide if ex-ante cost allocation fits these cases

Lessons Learned

- These cases (plus others) suggest that ex-ante cost allocation “methodology” of Order 1000 does not work in every case if the objective is to:
 - Align cost responsibility with benefits, even if “roughly” is the goal
 - Avoid costly and lengthy litigation
- Order 1000 has in fact lead to perverse results in some instances

Problems with Order 1000

- Failure to define benefits has led to accepted compliance filings that provide very loose definitions – such as California, where every transmission project allows greater penetration of renewables which in turn provides statewide benefits
- Social benefits (such as a cleaner environment, increased jobs, or a pleasing aesthetic) or very speculative “possible” benefits are allowable as a basis for cost allocation
- Conspiracy theorists might suggest this was a means to socialize costs but still meet the constraints that the Court placed on FERC
- Unfortunately, this will lead to increased litigation as Order 1000 methodologies are applied to specific cases with weird results

Why Should we be Concerned?

- **Socializing transmission costs masks true LMP price signals and distorts all of the benefits associated with those price signals**
- **Result will be increased investment uncertainty for new generation, as the value of reducing congestion can be wiped away by socialized transmission projects**
- **Transmission will be overbuilt relative to alternatives for which costs are not socialized**
- **Choices between remote renewables (wind or large-scale solar) and local distributed generation will be skewed towards the former, even though DG may be more cost-effective**
- **If states believe that cost allocation is unfair, projects simply wont get built**

What Should be Done?

- **Retain the working parts of Order 1000**
 - **Coordinated planning is always good (assuming states rights are protected)**
 - **Stakeholder participation is valuable**
 - **Involve states and RTOs in decision-making**
 - **Retain cost allocation principles**
- **Throw out ex-ante cost allocation methodology in favor of a process based on principles**
- **Evaluate each project individually ensuring that costs are allocated roughly commensurate with benefits**

Can this be Done?

- The argument that costs and benefits of any given transmission project can not be fairly estimated is wrong
- Every transmission project should be (and is) evaluated based on impacts to the grid – both positive and negative
- Benefits and costs can be “roughly” derived from these planning studies
- Regulators should be aware of any transmission project proposal that doesn't carefully evaluate costs and benefits

Can this be Done? (*cont.*)

- **Costs of reliability projects (or the reliability portions of multi-value projects) should be allocated to the planning regions where reliability is otherwise affected**
- **Costs of economic projects (or the economic portions of multi-value projects) should be allocated to the economic beneficiaries**
- **Costs of public policy projects should be allocated to the states where the state's public policy creates the need for all or part of a project**
- **Perfect need not be the enemy of the good**

A row of high-voltage power line towers receding into the distance against a sunset sky. The sun is low on the horizon, creating a warm orange and yellow glow. The towers are silhouetted against the bright sky.

Questions?

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