

Rule 21 Working Group 3
Issue 12 Brief
December 6, 2018

How can the Commission improve certainty around timelines for distribution upgrade planning, cost estimation, and construction? Should the Commission consider adopting enforcement measures with respect to these timelines? If so, what should those measures be?

Addition (Issue D): When should the Commission consider results of an initial review or detailed study to be binding? Under what circumstances should the Commission allow the results to be changed?

Discussion Questions

Disclaimer: comments below are intended to frame and seed discussion and are based on consultations with parties, but have not been verified and may contain inaccuracies or incomplete portrayals.

1. What is the problem/challenge this issue is addressing? How does this issue go beyond the discussion and consensus/non-consensus reached in Issue 10?

Comment (a): Main issues are accountability and communication. There is no accountability and no mandate for timelines. For some projects, it's impossible to get information, nothing has happened for months, can't tell what is going on, no notices.

Comment (b): Main issue is consistency. There are many examples of utilities requesting or informing of multiple and repeated extensions of timelines with no repercussions.

Comment (c): Delays and uncertainties have caused developers to cancel projects and leave the solar business behind. Delays and uncertainties are causing people to lose jobs and companies not to survive.

Comment (d): Long (i.e., 36-week) waiting times are destroying solar installers.

Comment (e): Our expectation is to have no expectation (developer). We presume a year and tell our customers, "we can't really give you timelines, have to wait and see." And depending on project, we get nothing specific to an individual project, just general situation from a service planner, such as: "currently we are running between 6-9 months right now."



Comment (f): We (developer) need to start building 4 months before design is expected, procure 2 months ahead of construction. Our customer pays us for what is done. If distribution upgrade design and construction are delayed, our customer has to carry the interest costs and loan repayments of the delay, with no cash flow, or we have to float the bill for them. Many of our customers finance through leasing paid by energy bill savings.

2. Which utilities communicate expected timelines in interconnection agreements? Which utilities don't? How well and in what manner do utilities communicate about timeline adjustments?

Comment (a): SDG&E provides milestones in interconnection agreements, which are based on project-specific estimates and other conditions/situations the utility is currently facing that could affect timelines. SDG&E sets expectations and communicates with customers, and adjusts milestones and communicates adjustments as needed.

Comment (b): SCE has annexes in interconnection agreements with timelines. SCE gives 60 business days design and 60 business days construction as standard timelines.

Comment (c): PG&E is the main focus of Issue 12. PG&E doesn't have any standard timelines, and getting timelines depends on the individual regional service planners; some service planners are responsive and give timelines and some don't. And it can be difficult to communicate directly with service planners.

Comment (d): PG&E puts timelines in agreements in certain circumstances, like Rule 21 exporting agreements and CA Department of Corrections projects.

Comment (e): FERC wholesale tariffs WDAT don't require timelines; why has FERC not required?

3. Which timelines are most significant or priorities for this issue? Where exactly do we need more certainty? Could be timelines for detailed review, planning, design, cost estimation, and/or construction. Or could be for specific types of projects.

Comment (a): Substation upgrades, when needed, introduce a much longer timeline, 1-2 years or more. Substation upgrades have mostly been an issue with PG&E, and not at all for SDG&E.

Comment (b): NEM aggregation projects, which can require review of ownership and land, can take a long time.



Comment (c): Additional metering for solar and storage can take 6-12 months, reducing that timeline is a priority.

Comment (d): Variability and thus uncertainty can be high even for a 5-kW residential solar system, such as 6-12 months for a transformer that includes 15-90 days for engineering review and 3-12 months for implementation.

4. In the absence of communicated timelines for specific projects, are there or could there be well-understood benchmarks or standard practices?

Comment (a): Timelines don't mean anything until you have done the design!

Comment (b): Timelines could be type-specific, there is not a wide universe of projects, mostly five scopes of work, not highly customized: line-side taps, load-side taps, no-load primary service (carve-out in NEMA), no-load secondary service (carve-out in NEMA), and service upgrades.

Comment (c): Benchmarks could be ordered according to size, whether storage is included or not, presence of existing generators, and line-side vs. load-side side tap.

5. How serious or prevalent are deviations in timelines from expected timelines, communicated timelines, or benchmark timelines? What percentage of projects? What length of delays? What data are available to show the extent of the problem?

Comment (a): Construction timeline uncertainties affect a very small percentage of our (utility) customers.

Comment (b): There will always be an outlier project.

Comment (c): There is a lot of variation; some projects take 8-12 weeks for design, some take 15-40 weeks for design. Example of a project where a transformer took 9 months for design and 4 months for construction.

Comment (d): We may know more after the planned review of utility practices for interconnection (RFI).

Comment (e): There are many anecdotes already presented, such as a 400-kW NEM generator who lost over \$200,000 in generation value because of delays in a substation upgrade, beyond the point of possible PTO.

Comment (f): Generally SCE is meeting its 60/60 timelines, and communicating when it doesn't.

6. What causes variability, and thus up-front uncertainties in timelines? What are lessons learned about delays or lack of responsiveness?



Comment (a): Examples of factors that extend construction timelines and only become apparent after design is completed: (1) when replacing a pole need to get other utilities involved and the mechanism for approval by other utilities can be a 45-day process; (2) FAA if need to increase height of pole by 1ft, they have 45 days to respond; (c) land rights or permitting issues.

Comment (b): Construction timeline variability or uncertainties come from construction crews being used for emergency work, storm duty, or customer site note ready or customer hasn't done necessary preparation work.

Comment (c): Depends on scope of work, jurisdiction, the timing of construction, the type of construction, permits, environmental reviews, trenching, time of year (can't have substation outages during the summer).

Comment (d): Introduction of new technologies, especially introduction of new types of batteries in home systems; our designers not familiar with them or have to learn about them first.

7. How much of a present-time phenomenon are project delays or uncertainties, given that utilities may have altered their practices recently?

Comment (a): PG&E recently set up a dedicated centralized work group to handle all generation interconnection requests, rather than having it be regional-based where some cost estimators are not so familiar with generation interconnections.

Comment (b): PG&E's intention to centralize in a dedicated work group is still in the pilot phase and doesn't handle all projects. There have been tangible results and improvements (i.e., 8 weeks for simple 800-kW upgrade, down from 36 weeks), and this group needs further support and improvement.

8. What are some potential enforcement or mitigation measures, or new utility practices?

Comment (a): Some measures might not be written as universal, but rather apply or don't apply in certain situations and are provided to assist the utility.

Comment (b): Don't see any need for enforcement measures. Flexibility is important, and once defined numbers are established, it takes flexibility away.

Comment (c): Notifications and expectation-setting: laying out timelines for specific things like metering.



Comment (d): More data and greater transparency, with clear tracking, for different project types.

Comment (e): Maybe utilities can do something more uniform on notices.

Comment (f): Look at what Massachusetts and New York have done.

Comment (g): Beyond notifications, we would like to see better adherence of timelines and consistency.

Comment (h): Tie GRC cost-recovery to review of interconnection performance.

Comment (i): Compensate for loss of generation due to delays.

Comment (j): We are doing the best we can already, given many competing priorities; penalties would not change that and would push us into a non-productive cost-benefit calculus.

Comment (k): There is already Section K for dispute remedy!

Comment (l): Example of a performance-based compensation mechanism is MA new rule for interconnection; if utility gets better it will receive a financial bonus.

Comment (m): (Utility) we would be open to looking at it performance based incentives. How would it work? We don't have cost-recovery mechanisms, so how would performance incentives would work from a cost recovery perspective?

Comment (n): Put incentives into interconnect fee, more we get, more we can put into interconnection, oftentimes it is outrageously expensive. Cost recovery is a very significant issue.

Comment (o): Not much precedent in our world for enforcement. Rule 21 only has hard timelines for completing supplemental review.

Comment (p): Maybe start with a very clear reporting standard when you go beyond 60 days design and 60 days construction, along with someone at PUC holding utilities accountable, measuring their success in holding to 60/60, and allowing them to present mitigating circumstances and allowing for flexibility around mitigating circumstances.