

Discussion of Manual 14B Concerns Raised by Stakeholders

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- Concern: Use of the term end of useful life
- PJM Position (Consistent with FERC precedent):
 - This term is intended to address the ability of a facility to continue to be reliable, operationally effective, etc.
 - This term is not intended to be limited to a discussion of accounting principles

See PJM Research on FERC's use of term End of Useful Life in non-accounting context in Appendix



- Concern: Section 1.5.4 As proposed, extends the basis for planning decisions
- PJM Position:
 - PJM believes this is an overreach for the PJM RTEP which is intended to complete planning studies associated with load flow, short circuit, and stability type studies



Appendix

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Background

February 15: FERC Show Cause Order (Attachment M-3 Process)

• FERC Order directs PJM TOs to convene a minimum of 3 separate meetings to address assumptions, needs, and solutions – PJM and the PJM TOs are using this process for Supplemental Project planning.

July 26: Markets and Reliability Committee sunsets the Transmission Replacement Process Sr. Task Force.

August 31: FERC issues two CAISO Orders

- Commission denied a Complaint filed by the California Public Utility Commission and others alleging that Pacific Gas & Electric Company (PG&E) was violating its obligations under Order No. 890 to conduct an open, coordinated and transparent transmission planning process because more than 80% of PG&E's transmission planning costs were "self-approved projects" with no opportunity for stakeholder input. FERC acknowledged complainants' concerns and encouraged PG&E to continue its efforts to work with complainants and other stakeholders to develop a process to share and review information for asset management projects and activities that are not subject to Order No. 890.
- Southern California Edison Co. (SoCal) filed an amendment to its OATT to create an annual transmission maintenance and compliance review (TMCR) process wherein SoCal Edison proposed to share and review information with stakeholders about certain transmission-related maintenance and compliance activities not subject to consideration through CAISO's transmission planning process. FERC accepted SoCal's TMCR process.

September 26, 2018:

• FERC's order issued accepting the compliance filings by PJM (OA, Schedule 6) and the PJM TOs (OATT, Attachment M-3) and denying the request for rehearing by the Load Groups in Docket EL16-71.



The Commission found as follows:

Supplemental Projects:

- PJM TOs have primary responsibility for planning Supplemental Projects; and
- PJM plays a relatively minor role in which it performs a "do no harm" analysis for the proposed Supplemental Projects In response to Load Group's request for an express directive that TOs respond to stakeholder comments, FERC found:
- The process required by the February 15 Order strikes the right balance;
- While Order 890 requires that stakeholders be afforded the opportunity to provide meaningful input, it does not dictate whether and how TOs must respond to that input; and
- In response to concerns raised related to Attachment M-3, FERC stated the TOs are required only to meet the requirements of Order 890, not exceed them; therefore, stakeholders' requests for additional detail and process in Attachment M-3 constitute "alternative proposals" none of which is necessary to ensure compliance with Order No. 890.

Compliance Filings:

- FERC found the compliance filings "are adequate to ensure compliance with Order No. 890" and Load Group's requests for additional provisions go beyond the February 15 Order.
- <u>Dispute Resolution</u>: FERC accepted TOs' proposal to apply the OA, Schedule 5 dispute resolution procedures to Attachment M-3, but clarified that substantive disputes regarding Supplemental Projects will be subject to Schedule 5 dispute resolution procedures. FERC rejected Load Group's request that the planning of Supplemental Projects should not be considered final until the conclusion any dispute resolution.



Significant Collaboration:

- Numerous conference calls with both the TO's and Amp/ODEC
- Appreciative of stakeholder feedback over the last six (6) months

PJM Proposal:

- Incorporates most of AMP/ODEC proposed changes
- Incorporates input from Transmission Owners
- Provides updated guidance while PJM gains experience in 2019
- Aligns with Attachment M-3 & with FERC and PJM Governing Documents
- Provides:
 - additional transparency to PJM RTEP process
 - stakeholders a feedback opportunity at quarterly session in 2019
- PJM committed to working with all stakeholders for the successful implementation
- PJM appreciates the efforts of all of the stakeholders for further alignment

Next Steps:

- December 20 Markets and Reliability meeting first read
- January 24 Markets and Reliability meeting second read

Note: https://www.pjm.com/-/media/documents/manuals/m34.ashx



Appendix – Useful Life

PJM Research: "Useful Life"

-In the non – accounting sense

1) Tex. E. Transmission, LP, 129 F.E.R.C. P61,014, 61060 (2009)

Action: Order Issuing Certificate and Approving Abandonment

"¶ 21. Texas Eastern requests authorization to abandon by removal the existing natural gas-powered turbine and compressor at its Kosciusko Compressor Station which it alleges is out-dated, inefficient, and at the end of its useful life. The fuel used to power the existing unit is projected to be more expensive than the electricity needed to power the proposed new electric compressor. Accordingly, the Commission finds that approval of the requested abandonment is in the public interest."

2) South Carolina Public Service Authority, 67 F.E.R.C. P62,098, 64168 (1994)

Action: Order Amending Transmission Line License

"South Carolina Public Service Authority filed an application to replace an existing transmission line. The existing line is nearly 40 years old and has reached the end of its useful life. The transmission line is 27.6 miles long, originating at the switchyard bus of the Clark Hill Dam on the Savannah River and terminating at Santee-Cooper's Aiken No. 1 substation. The line is 115 kV, 3-phase, 60-cycle, single circuit on wood pole H-frame structures."



PJM Research: "Useful Life"

3) Fraser Papers Inc., Flambeau Hydro, LLC, 89 F.E.R.C. P61,286, 61897 (1999)

Action: Order Granting Rehearing and Approving Transfer of Licenses

Footnote 4: "As we noted in our prior order (87 at p. 61,692), citing our 1990 Decommissioning Policy Statement, it is the Commission's policy to take a hard look at license transfer applications under circumstances in which the transferee's financial resources are in question and there is reason to believe that the project may be approaching the end of its useful life. We have taken that hard look here, and have not found any significant physical infirmities or other problems that would cause us to believe that the projects are likely to face decommissioning during the term of the licenses. As discussed above, in the absence of a demonstrated need for significant construction investment, we are unwilling to use economic forecasting by itself as a basis for denying license authority or license transfer authority."

4) S. Cal. Edison Co., 143 F.E.R.C. P62,177, 64464 (2013)

Action: Order Amending License

"¶ 2. The existing 12-kV substation at Big Creek No. 3 was installed in the late 1950s. The substation has aged and is near the end of its useful life. The auxiliary devices such as the protective relays, meters and switches are also aging and facing obsolescence. In addition, most of the equipment and protective devices are no longer available or difficult to find replacement parts. Moreover, the substation lacks protection such that animal intrusion may cause electrical failures and resulting outages."



PJM Research: "Useful Life"

5) Ala. Power Co., 93 F.E.R.C. P62,239, 64451 (2000)

Action: Order Amending License Articles

C. Proposed Action and Alternative

2. Alternative

"The only viable alternative to the proposed action is no-action, which would be to deny the application to amend the license to upgrade the turbine runner. APC states that without the upgrade, the unit is nearing the end of its useful life. Breakdowns could lead to unplanned outages and inefficient operation of the project."



PJM Research: "Useful Life"

6) Kimberly-Clark Tissue Co., 90 F.E.R.C. P62,163, 64221-64222 (2000)

Action: Order Amending License

6a) "The Hydro-Kennebec Project consists of a dam, an impoundment, a head-gate/intake structure and a power canal leading to an old powerhouse that contains 11 generating units with an installed capacity of 3,730 kW, a forebay structure and another powerhouse containing 2 generating units with an installed capacity of 15,433 kW, and appurtenant facilities. The total installed capacity of the project is 19,163 kW. The old powerhouse is located at the end of the canal and has not been operating since 1998. The license indicated in its 1985 filing for a new license that it will retire the old powerhouse at the end of its useful life. In a letter dated August 28, 1998 to the Commission's New York Regional Office, the licensee has indicated that the older generating units have reached the end of their useful life. The licensee shut down the old generating units and drained the canal leading from the gatehouse and headgate structure to the old powerhouse."

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PJM Research: "Useful Life"

6b) (Pincite: 90 F.E.R.C. P62,163, 64224)

"B. Purpose and Need for Action

In general, the project licensee proposes to delete from the license an inoperable old powerhouse, containing 11 non-operating generating units, a wood-framed gatehouse, and a canal that connects a project headgate structure to the old powerhouse. The old powerhouse has an authorized capacity of 3,730 kilowatts (kW). The licensee proposes to reduce the installed capacity of the project from 19,163kW to 15,433 kW.

The licensee states the older generating units, installed in the early 1900s, have reached the end of their useful life and are no longer needed for project operations. In 1998, the licensee ceased generating power from the old powerhouse, closed the canal headgate structure, and dewatered the canal."

7) Public Serv. Co., 75 F.E.R.C. P61,111, 61382 (1996)

Action: Order Issuing New License

"The evidence in the record before us indicates that the Ayers Island Hydroelectric Project is economically and physically sound. No party has requested that the project be decommissioned now or at any time in the foreseeable future, and no one has advanced any reason to expect that the project will reach the end of its useful life during the term of the new license. Thus, there is nothing in the record to support establishing a decommissioning fund."



PJM Research: "Useful Life"

8) Duke Energy Ky., 149 F.E.R.C. P62,111, 64290 (2014)

Action: Order Approving Abandonment

"The pipeline segment to be abandoned by sale and conveyed to Duke Ohio (AM-1 River Crossing) originates at a pipeline valve in Kenton County, Kentucky, about 400 feet south of the Ohio River, and extends northward about 2,100 feet, under the river, to an interconnection with distribution facilities of Duke Ohio at a pipeline valve in Hamilton County, Ohio. It is part of Duke Kentucky's Line AM-1 natural gas pipeline. Duke Kentucky states that AM-1 River Crossing was constructed in 1947 and was not included in the portion of Line AM-1 that was replaced in 1971. Consequently, the AM-1 River Crossing is approaching the end of its useful life and may need to be replaced in the future.

Proposed Service Area

Duke Ohio requests a Section 7(f) service area determination permitting it to enlarge or extend its facilities as described in their application without the need to apply to the Commission for further authorization. Duke Ohio states that its proposed service area will encompass the AM-1 River Crossing, the associated right-of-way and sufficient adjacent right-of-way to accommodate future replacement of the existing pipeline segment. Duke Ohio states that if the service area determination is granted, it will allow Duke Ohio to replace the line that is approaching the end of its useful life and thereby ensure continued reliable delivery of gas via the line to Duke Ohio's distribution system."



PJM Research: "Useful Life"

9) N. Am. Elec. Reliability Corp., 133 F.E.R.C. P61,008, 61030 (2010)

Action: Order on Compliance Filing

"¶ 38. The Commission rejects KCP&L's proposal regarding a "grace period" for new cyber assets. With respect to newly installed assets, the Commission addressed this issue in Order No. 706, in which the Commission made clear that TFEs do not apply to future assets. The Commission found that "the justification for technical feasibility exceptions is rooted in the problem of long-life legacy equipment and the economic considerations involved in the replacement of such equipment before the end of its useful life.""

10) 1980 FERC LEXIS 2425, *39 (1980)

Action: Initial Decision on Justness and Reasonableness of Rate Increase

"When a nuclear power plant reaches the end of its useful life, the owner cannot simply whistle in a commercial wrecker to swing an iron ball against the facade, reduce the structure to a pile of rubble, and cart the detritus off for disposal God Knows Where."



PJM Research: "Useful Life"

11) Consolidated Gas Supply Corp., 1 F.E.R.C. P63,003, 65027 (1976)

"The curve was selected because it best fit Consolidated's experience with a prior extraction plant which had reached the end of its useful life in 1969. However, the old plant was an absorption-type plant, while the Hastings facility uses an entirely different, and much improved, technology -- a cryogenic process -- for extracting heavy hydrocarbons from the natural gas flow."

12) Mandatory Reliability Stds. for Critical Infrastructure Protection, 122 F.E.R.C. P61,040 (2008)

¶ 169. NERC explains that the CIP Reliability Standards include references to technical feasibility to recognize that, in many cases, equipment in place in substation and generating plant environments was implemented with operational functions paramount to all other considerations, including security. This equipment is not at the end of its **useful life** and historically has not been designed with ready access to software updates and patches. Such software upgrades that could increase functionality without directly contributing to reliability generally have not been made. NERC states that modern replacement equipment is more readily compatible with an environment where updates and patches are more commonplace and security functionality is an understood necessity.



PJM Research: "Useful Life"

12) Mandatory Reliability Stds. for Critical Infrastructure Protection, 122 F.E.R.C. P61,040 (2008)

¶ 180. We agree with NERC and other commenters on the underlying rationale for a technical feasibility exception, i.e., that there is long-life equipment in place that is not readily compatible with a modern environment where cyber security issues are an acknowledged concern. While equipment replacement will often be appropriate to comply with the CIP Reliability Standards, such as in instances where equipment is near the end of its useful life or when alternative or supplemental security measures are not possible, we acknowledge that the possibility of being required to replace equipment before the end of its useful life is a valid concern.

¶ 181. The Commission, however, disagrees with Northern Indiana that technical feasibility should be interpreted to apply to future assets also. The justification presented for technical feasibility exceptions is rooted in the problem of long-life legacy equipment and the economic considerations involved in the replacement of such equipment before the end of its useful life.