

#### Order 1920, High Level Filing Content

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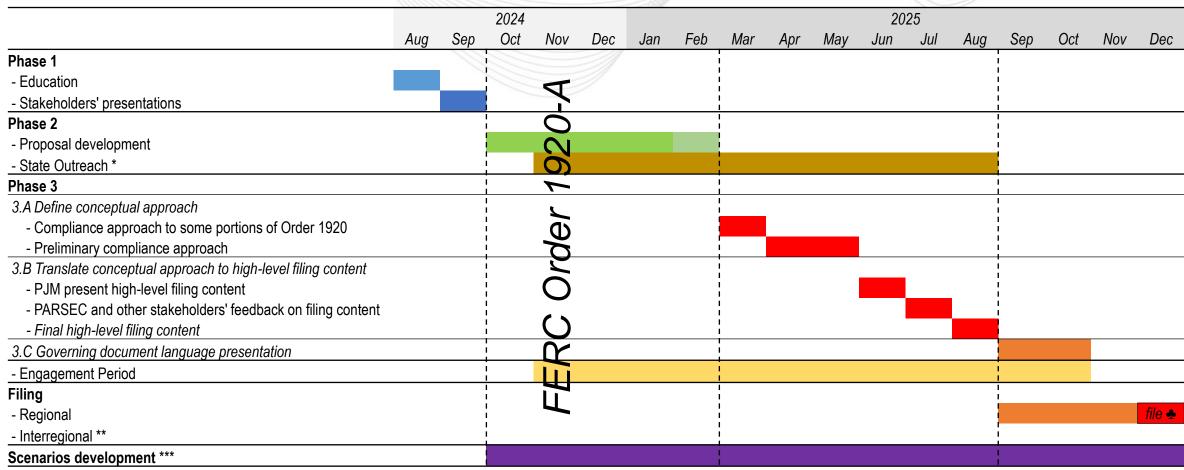
# Presentation Scope and Stakeholder Engagement Plan



- This deck translates PJM compliance approach discussed at the special TEACs on March 13, April 10, May 9, and May 30 into high-level language corresponding to each of Order 1920's regional requirements – this translation is referred to as compliance tracker
- PJM will seek stakeholder feedback on the compliance tracker and finalize it in August
- PJM will present filing language to stakeholder in September and October



#### Order 1920 Stakeholder Engagement Timeline



<sup>\*</sup> State Outreach Topics: 1) process and logistics 2) governance 3) evaluation process and seletion criteria 4) voluntary funding 5) counterfactual for cost allocation

<sup>\*\*</sup> On 5/23/2025 FERC granted PJM's request to extend the interregional filing deadlines for the protocols with MISO and SERTP to 12/12/2026 and for those with NY-ISO and ISO-NE to 6/14/2027

<sup>♣ 6-</sup>month extension moves filing deadline to 12 December 2025; implementation deadline remains 12 June 2027 as required by Order No. 1920-A



### Definitions and Acronyms



- LTRTP Cycle: The LTRTP Cycle consists of the scenario development, the analysis to identify LT Needs, and the evaluation and selection to preliminarily select LTRT Facilities. No LTRT Facilities can be selected five years after the start of the LTRTP Cycle
- LT Needs: LT Needs are transmission needs identified through reliability and economic analyses performed on LT Scenarios that may require long-lead solutions (6 years or more)
- Core LT Needs: Core LT Needs are LT Needs identified by PJM through reliability analyses as the minimum set of actionable needs to maintain system reliability
- Additional LT Needs: Additional LT Needs are LT Needs that are not Core LT Needs
- Backstop Plan: The Backstop Plan is the LTRT Plan that identifies solutions to address Core LT Needs
- Final Plan: The Final Plan is the LTRT Plan that identifies solutions to address Core LT Needs, and solutions addressing Additional LT Needs voluntarily sponsored by PJM states or Project Developers



- ATT: Alternative Transmission Technology
- CA: cost allocation
- **LT**: Long-Term
- LTRT: Long Term Regional Transmission
- LTRTP: Long-Term Regional Transmission Planning
- RTP: Regional Transmission Planning



# Compliance Tracker



# Long-Term Regional Transmission Planning Requirements



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We adopt the NOPR proposal to require TPs in each transmission planning region to participate in a RTP process that includes LTRT Planning, meaning RTP on a sufficiently long-term, forward-looking, and comprehensive basis to identify Long-Term Transmission Needs, identify transmission facilities that meet such needs, measure the benefits of those transmission facilities, and evaluate those transmission facilities for potential selection in the regional transmission plan for purposes of CA as the more efficient or cost-effective transmission facilities to meet Long-Term Transmission Needs. We also adopt the NOPR proposal to require that LTRT Planning comply with the following existing Order Nos. 890 and 1000 transmission planning principles: (1) coordination; (2) openness; (3) transparency; (4) information exchange; (5) comparability; and (6) dispute resolution.	224	Sustained	210-217	PJM will implement a RTP process that includes LTRT Planning, meaning RTP on a sufficiently long-term, forward-looking, and comprehensive basis to identify Long-Term Transmission Needs, identify transmission facilities that meet such needs, measure the benefits of those transmission facilities, and evaluate those transmission facilities for potential selection in the regional transmission plan for purposes of CA as the more efficient or cost-effective transmission facilities to meet Long-Term Transmission Needs. PJM will continue to apply Order 890 and 1000 planning principles as per current practices: (1) coordination; (2) openness; (3) transparency; (4) information exchange; (5) comparability; and (6) dispute resolution.	5



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
In their filing to comply with this final rule, TPs that wish to continue to use some or all of their existing RTP and CA processes to consider transmission needs driven by Public Policy Requirements must demonstrate that continued use of any such processes does not interfere with or otherwise undermine LTRT Planning as set forth in this final rule.	243	The Commission will not presume the existing RTP and CA processes used to consider transmission needs driven solely by Public Policy Requirements are just and reasonable. PJM's State Agreement Approach is unaffected by Order 1920's requirement to justify the continued use of RTP and CA processes to consider transmission needs driven by Public Policy Requirements, and Order 1920 does not prohibit PJM from continuing to use its existing State Agreement Approach. If the RSEs in PJM agree to rely on PJM's existing State Agreement Approach as an Order 1920 State Agreement Process, PJM must propose and demonstrate that it complies with all Order 1920 State Agreement Process requirements.	210, 213	PJM's approach to addressing Long-Term Needs will not disturb PJM's existing RTEP approaches related to Public Policy or the State Agreement Approach.	6



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We require TPs to satisfy specific requirements in implementing LTRT Planning, including requirements to: (1) use a transmission planning horizon of no less than 20 years into the future in developing Long-Term Scenarios; (2) reassess and revise those scenarios at least once every five years; (3) incorporate into the Long-Term Scenarios a set of Commission-identified categories of factors that give rise to Long-Term Transmission Needs; (4) develop a plausible and diverse set of at least three Long-Term Scenarios; (5) perform sensitivity analyses of uncertain operational outcomes during multiple concurrent and sustained generation and/or transmission outages due to an extreme weather event across a wide area; and (6) use "best available data" in developing Long-Term Scenarios.	248	See below		PJM's LTRTP process will (1) have a planning horizon of at least 20 years; (2) reassess and revise the scenarios at least every 5 years; (3) incorporate into the Long-Term Scenarios each of the seven Factor Categories enumerated in Order No. 1920; (4) develop a plausible and diverse set of three Long-Term Scenarios; (5) develop extreme weather sensitivities for each of the three Long-Term Scenarios; and (6) use best available data to develop the Long-Term Scenarios.	7



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number			
We adopt the NOPR proposal to require TPs in each transmission planning region to develop Long-Term Scenarios as part of LTRT Planning using no less than a 20-year transmission planning horizon.	344	Sustained	237	PJM will develop three Long-Term Scenarios with a 20-year planning horizon	8			
We modify the NOPR proposal to require TPs in each transmission planning region to reassess and revise the Scenarios that they use in LTRT Planning at least once every five years.	377	Sustained	256	PJM will reassess and revise Long-Term Scenarios at least every 5 years.	9			
We require TPs to complete the steps of the LTRT Planning cycle and determine whether to select LTRT Facilities no later than three years from the date when the LTRT Planning cycle began.	379	Sustained	260-261	The LTRTP Cycle includes preliminary determination of solutions to address Core LT Needs prior to the close of year 3 of each LTRTP Cycle.	10			



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TPs must conclude a LTRT Planning cycle before developing LT Scenarios at the beginning of the next LTRT Planning cycle. Given that, as we state directly above, nothing in this final rule prevents TPs from evaluating and selecting additional LTRT Facilities after year three of the LTRT Planning cycle and before the next five-year LTRT Planning cycle begins, we further find that TPs must designate the point in time or action that concludes a LTRT Planning cycle.	381	In most circumstances, we expect that TPs will include previously selected Long-Term Regional Facilities, including those not yet in service, in updated planning models to improve the accuracy of LTRTP.	262	The LTRTP Cycle will start with the scenario development before proceeding to the analysis that will identify the LT Needs. PJM will then open a competitive window and evaluate and preliminarily select LTRT Facilities within three years. PJM may then start the following LTRTP Cycle	



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We require TPs to reevaluate previously selected LTRT Facilities in certain specified circumstances.	383	We expect that if TPs conclude that previously-selected LTRTFs are not appropriate to use in a base case, TPs would provide an explanation to stakeholders who may be relying on the base case. But Order No. 1920 does not require that TPs include previously selected LTRTFs in the planning models that they use in a subsequent LTRTP cycle and it's appropriate to provide flexibility to TPs on how they update planning models.	262	[see rows 41-44]	12



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
TPs must incorporate in the development of LT Scenarios: (1) federal, federally-recognized Tribal, state, and local laws and regulations affecting the resource mix and demand; (2) federal, federally-recognized Tribal, state, and local laws and regulations on decarbonization and electrification; (3) state-approved integrated resource plans and expected supply obligations for load-serving entities; (4) trends in fuel costs and in the cost, performance, and availability of generation, electric storage resources, and building and transportation electrification technologies; (5) resource retirements; (6) generator interconnection requests and withdrawals; and (7) utility and corporate commitments and federal, federally-recognized Tribal, state, and local policy goals that affect LT Transmission Needs.	409	Factor Category Seven (corporate commitments) set aside.	296, 303	[see rows 14-20]	13



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We require TPs in each transmission planning region to incorporate Factor Category One: federal, federally-recognized Tribal, state, and local laws and regulations affecting the resource mix and demand, in the development of Long-Term Scenarios.	432	We expect Transmission Providers to work with states to ensure the way those state laws and regulations are incorporated into LT Scenarios reflects states' preferred implementation of those laws and regulations. Transmission providers must appropriately value the effect of states' policy decisions in regional transmission planning in order to ensure just and reasonable rates.	299	PJM will incorporate Factor Category One: federal, federally-recognized Tribal, state, and local laws and regulations affecting the resource mix and demand, in the development of Long-Term Scenarios	14
We require TPs in each transmission planning region to incorporate Factor Category Two: federal, federally-recognized Tribal, state, and local laws and regulations on decarbonization and electrification, in the development of LT Scenarios.  We acknowledge that there could be overlap between Factor Categories One and Two. In such a circumstance, TPs must account for the law or regulation in one of the two categories, not both.	440	Clarification: Order No. 1920 does not require transmission providers, when determining assumptions they will use when developing LT Scenarios where similar factors (or groups of factors affect a single assumption, to assume that the factors have additive effects on the relevant assumptions. Where factors may have overlapping effects on the planning assumptions, TPs must avoid double counting the effect that those factors have on assumptions used to develop Long-Term Scenarios.	273 & 276 (avoid double counting)	PJM will incorporate Factor Category Two: federal, federally-recognized Tribal, state, and local laws and regulations on decarbonization and electrification, in the development of LT Scenarios. In cases where Factor Categories One and Two overlap, PJM will account for the law or regulation only in one of the two categories	15



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We require TPs in each transmission planning region to incorporate Factor Category Three: state-approved integrated resource plans and expected supply obligations for load-serving entities, in the development of LT Scenarios.	447	Sustained	318	PJM will incorporate Factor Category Three: state-approved integrated resource plans and expected supply obligations for load-serving entities, in the development of LT Scenarios	16
We require TPs to incorporate Factor Category Four into the development of LT Scenarios because the relative cost of constructing and operating different types of generation or storage resources and the relative cost of electrifying certain energy end uses will affect LT Transmission Needs.	456	Sustained	301, 325-26	PJM will incorporate Factor Category Four: trends in fuel costs and in the cost, performance, and availability of generation, electric storage resources, and building and transportation electrification technologies, in the development of Long-Term Scenarios.	17
TPs must, in incorporating Factor Category Five into the development of LT Scenarios, account for likely resource retirements beyond those that have been publicly announced.	463	N/A	349	PJM will incorporate Factor Category Five, resource retirements, in the development of Long-Term Scenarios. PJM will account for likely resource retirements beyond those that have been publicly announced.	18
We require TPs to incorporate Factor Category Six because generation interconnection queues provide important information about future generation development over the transmission planning horizon and therefore affect LT Transmission Needs.	472	Sustained	301, 334	PJM will incorporate Factor Category Six, generator interconnection requests and withdrawals, in the development of Long-Term Scenarios.	19



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We require TPs to incorporate Factor Category Seven into the development of LT Scenarios because the relevant commitments and goals represent known consumer preferences that have been, and will continue to be, key drivers of LT Transmission Needs.	481	Requirement for TPs to consider corporate commitments when developing Long-Term Scenarios set aside. Requiring TPs to consider corporate commitments may introduce the risk of of one class of transmission users cross-subsidizing another class of transmission users.	303	PJM will incorporate Factor Category Seven: utility commitments and federal, federally-recognized Tribal, state, and local policy goals that affect LT Transmission Needs, in the development of Long-Term Scenarios.	20
With regard to the first three categories of factors, we require TPs to assume that legally binding obligations (i.e., federal, federally-recognized Tribal, state, and local laws and regulations) are followed, state-approved integrated resource plans are followed, and expected supply obligations for load-serving entities are fully met. We require that each LT Scenario account for and be consistent with, and not discount, factors in the first three categories of factors once the TPs have determined that such a factor is likely to affect LT Transmission Needs	507-510	Sustained		LT Scenarios will account for and be consistent with, and not discount, factors in the first three Factor Categories. PJM retains the discretion to determine whether particular factors are likely to affect LT Needs and therefore need to be accounted for in the development of Long-Term Scenarios, including for factor Categories One-Three.	



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We require TPs in each transmission planning region to revise the RTP processes in their OATTs to outline an open and transparent process that provides stakeholders, including federally-recognized Tribes and states, with a meaningful opportunity to propose potential factors and to provide timely input on how to account for specific factors in the development of LT Scenarios. We require TPs to publish on the public portion of an OASIS or other public website: (1) the list of the factors in each of the seven required categories of factors that they will account for in their LT Scenarios; (2) a description of each factor that they will account for in their LT Scenarios; (3) a general statement explaining how they will account for each of those factors in their LT Scenarios; (4) a description of the extent to which they will discount any factors in Factor Categories Four through Seven in each LT Scenario; and (5) a list of the factors that they considered but did not incorporate in their LT Scenarios.	528, 533	Clarification: states must have a meaningful opportunity to provide timely input on the development of Long-Term Scenarios, including factors and data inputs, and to explain how their own policies and planning affect Long-Term Transmission Needs. TPs must consult with and consider the positions of the Relevant State Entities as to how to account for factors related to states laws, policies and regulations when determining assumptions that will be used in development of Long-Term Scenarios. Where TPs determine that a factor based on a state's law, regulation or policy is likely to affect Long-Term Transmission Needs, TPs should rely on the state in determining how to account for the state-related factor when developing Long-Term Scenarios.	344-45	The LTRTP process will be open and transparent, providing stakeholders, including federally-recognized Tribes and states, with a meaningful opportunity to propose potential factors and timely input on how to account for specific factors in the development of LT Scenarios. PJM will publish: (1) the list of the factors in each of the seven required categories of factors that it will account for in its LT Scenarios; (2) a description of each factor that it will account for in its LT Scenarios; (3) a general statement explaining how it will account for each of those factors in its LT Scenarios; (4) a description of the extent to which it will discount any factors in Factor Categories Four through Seven in each LT Scenario; and (5) a list of the factors that it considered but did not incorporate in its LT Scenarios. PJM will consult with and consider the positions of the Relevant State Entities as to how to account for factors related to states laws, policies and regulations when determining assumptions that will be used in development of Long-Term Scenarios. If PJM determines that a factor based on a state's law, regulation or policy is likely to affect Long-Term Transmission Needs, PJM will consider the state input in determining how to account for the state-related factor when developing Long-Term Scenarios	22



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We require TPs in each transmission planning region to develop a plausible and diverse set of at least three Long-Term Scenarios. Specifically, we find that the set of at least three Long-Term Scenarios must be: (1) plausible, meaning that each scenario must itself be reasonably probable, and collectively that the set of plausible scenarios must reasonably capture probable future outcomes, and (2) diverse, in the sense that TPs can distinguish distinct transmission facilities or distinct benefits of similar transmission facilities in each LT Scenario.	575	TPs may develop additional scenarios beyond the three Long-Term Scenarios Order 1920 requires. When developing additional analyses or scenarios used to inform cost allocation, TPs have flexibility to depart from Order 1920's requirements related to development of Long-Term Scenarios, TPs may NOT use additional analyses for purposes of selection. When requested by the Relevant State Entities, TPs are required to conduct a reasonable number of additional analyses and scenarios.	365-67	[See row 7 for the first part of this requirement] Plausible and diverse as referred to the set of Long-Term Scenario mean: (1) plausible, meaning that each scenario must itself be reasonably probable, and collectively that the set of plausible scenarios must reasonably capture probable future outcomes, and (2) diverse, in the sense that TPs can distinguish distinct transmission facilities or distinct benefits of similar transmission facilities in each Long-Term Scenario.	23
We require TPs in each transmission planning region to develop at least one sensitivity, applied to each LT Scenario, to account for uncertain operational outcomes that determine the benefits of and/or need for transmission facilities during multiple concurrent and sustained generation and/or transmission outages due to an extreme weather event across a wide area.	593			PJM will develop for each of the three required Long-Term Scenario at least one extreme weather sensitivity	24



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We require that best available data inputs also reflect the list of factors that TPs account for in their LT Scenarios. We require TPs to update, as necessary, all data inputs each time they reassess and revise their LT Scenarios.	633			PJM will use best available data to develop LT Scenarios. PJM will update, as necessary, all data inputs each time it reassesses and revises the LT Scenarios	25
We require that the Order Nos. 890 and 1000 transmission planning principles apply to the process through which TPs determine which data inputs to use in their LT Scenarios. We require TPs in each transmission planning region to give stakeholders an opportunity to provide timely and meaningful input during each LTRT Planning cycle concerning which data inputs to use in LT Scenarios.	634			PJM will apply Order 890 and 1000 transmission planning principles to determine which data to use in the development of the LT Scenarios. PJM will give stakeholders the opportunity to provide feedback on data inputs for the LT Scenarios during each LTRTP Cycle	
We require disclosure of the methodology, criteria, assumptions, data and other information that underlie transmission plans, including LT Scenarios. (Consistent with Order 890 principles and existing confidentiality provisions)	642			PJM will disclose the methodology, criteria, assumptions, data and other information underlying each LTRT plan, including Long-Term Scenarios in accordance with applicable confidentiality provisions	27



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We require TPs, as part of LTRT Planning, to measure seven specified benefits that were enumerated in the NOPR ("set of seven required benefits" or "required benefits") in each LT Scenario. We require TPs to use those measured benefits when evaluating LTRT Facilities to determine whether they more efficiently or cost-effectively address LT Transmission Needs. The seven required benefits that we require TPs to measure and use in LTRT Planning are: (1) avoided or deferred reliability transmission facilities and aging infrastructure replacement; (2) a benefit that can be characterized and measured as either reduced loss of load probability or reduced planning reserve margin; (3) production cost savings; (4) reduced transmission energy losses; (5) reduced congestion due to transmission outages; (6) mitigation of extreme weather events and unexpected system conditions; and (7) capacity cost benefits from reduced peak energy losses.	667, 719	Requirement to measure benefits sustained, but transmission providers are not required to use the set of seven required benefits to help inform their identification of LT Transmission Needs	31, 377	For each of the the Long-Term Scenarios, PJM will measure at a minimum the following seven enumerated benefits when evaluating LTRT Facilities: (1) avoided or deferred reliability transmission facilities and aging infrastructure replacement; (2) a benefit that can be characterized and measured as either reduced loss of load probability or reduced planning reserve margin; (3) production cost savings; (4) reduced transmission energy losses; (5) reduced congestion due to transmission outages; (6) mitigation of extreme weather events and unexpected system conditions; and (7) capacity cost benefits from reduced peak energy losses or the corresponding reduced loss of load benefit.	. 28



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We require TPs in each transmission planning region to include in their OATTs a general description of how they will measure each of the seven benefits included in the required set of benefits that we require them to measure and use in LTRT Planning.	837 - 838	Order 1920 does not require TPs to engage in generation or resource planning as part of LTRTP. Order 1920 does not prohibit TPs from proposing to establish protocols by which they can rely on resource planners and LSEs for generation-based data	419-20	PJM will measure Benefit 1 as the avoided cost of replacing planned transmission facilities. Benefits 2-7 will be measured through a production cost simulation that accounts for both normal operating conditions and extreme weather events.	29
We require TPs in each transmission planning region, as part of LTRT Planning, to calculate the benefits of LTRT Facilities over a time horizon that covers, at a minimum, 20 years starting from the estimated in-service date of the transmission facilities, and we require that this minimum 20-year benefit horizon be used both for the evaluation and selection of LTRT Facilities. We require that, to the extent that TPs estimate the costs of LTRT Facilities beyond the in-service date of the transmission facilities, they must estimate those future costs over the same time horizon as the estimated benefits.		Sustained	424	PJM will use a 20-year horizon starting from the estimated in-service date of the transmission facilities to calculate their benefits for the evaluation and selection stages of the LTRTP cycle. PJM will use the same corresponding horizons for the benefits and costs associated with the LTRT Facility.	30



Order 1920 Compliance Obligation	20 Compliance Obligation Parag Modified by Order No. 192		Parag	Compliance Plan	Row Number
We require TPs that propose to use a portfolio approach when evaluating the benefits of LTRT Facilities to include provisions in their OATTs regarding their use of the portfolio approach.	889	Sustained		PJM will use its engineering judgement in determining whether a project-by-project approach or portfolio approach is most appropriate depending on the circumstances.	31
We require TPs in each transmission planning region to include in their OATTs an evaluation process, including selection criteria, that they will use to identify and evaluate LTRT Facilities for potential selection to address LT Transmission Needs.	911		450	PJM will first conduct the evaluation process, which will sequentially screen projects and calculate benefits for remaining candidate solutions or their combinations.  PJM then will apply the following selection criteria to recommend for selection among the remaining candidate solutions or their combinations: the expected vs. required in service date; the robustness of the proposed solution across Long-Term Scenarios and sensitivities; the expandability of the proposed facility; constructability, including the maximization of existing right of ways; operational performance and flexibility; benefits and costs, including the maximization of benefits, other things being equal. PJM is technology-neutral and will consider all solutions holistically based on their merits, including Alternative Transmission Technologies. PJM may evaluate solutions individually or in conjunction with one another based on what PJM deems most appropriate given specific circumstances. PJM may independently take actions to address Core LT Needs and seek the support of the states or Project Developers to pursue Additional LT Need through Voluntary Funding Opportunities. [Serow 34 for additional details regarding transparency]	32



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We require TPs in each transmission planning region to propose, after consultation with Relevant State Entities and other stakeholders, evaluation processes, including selection criteria, that they believe will ensure that more efficient or cost-effective LTRT Facilities are selected to address the transmission planning region's LT Transmission Needs.	924		445	See row 32. By the time of the compliance filing, PJM will have consulted with PARSEC and other stakeholders and sought the support of PARSEC.	33		
We require TPs in each transmission planning region to propose evaluation processes, including selection criteria, that are transparent and not unduly discriminatory. We require that the determination of why a particular LTRT Facility (or portfolio of such Facilities) was selected or not selected must include the measured benefits for each alternative LTRT Facility (or portfolio of such Facilities) considered in the LTRT Planning process.	954	Clarification: TPs' evaluation processes must compare the measured benefits of LTRT Facilities against their estimated costs. TPs' evaluation processes must culminate in a determination that is sufficiently detailed for stakeholders to understand why a particular LTRT Facility was selected or not.		Determinations regarding whether to select a particular LTRT Facility will be sufficiently detailed for stakeholders to understand. [See row 35 regarding other elements of this requirement]			



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TPs in each transmission planning region must make clear in their OATTs the point in the LTRT Planning evaluation process at which they will accept LTRT Facility proposals from stakeholders, including nonincumbent transmission developers. Second, TPs' evaluation processes must estimate the costs and measure the benefits of the LTRT Facilities (or portfolio of such Facilities) that are identified or proposed for potential selection, in addition to evaluating the identified LTRT Facilities (or portfolio of such Facilities) using any qualitative or other quantitative selection criteria that the TPs in a transmission planning region propose to apply. Third, TPs must designate a point in the evaluation process at which TPs will determine whether to select or not select identified LTRT Facilities (or portfolio of such Facilities). This point must be no later than three years following the beginning of the LTRT Planning cycle. Finally, the evaluation process must culminate in determinations that are sufficiently detailed for stakeholders to understand why a particular LTRT Facility (or portfolio of such Facilities) was selected or not selected.	955			After identifying LT Needs and tagging as Core those LT Needs that PJM may address independently to maintain system reliability, PJM will evaluate opportunities for right sizing and then open a competitive window to solicit LTRT Facility proposals for the LT Needs not already addressed through right sizing [See row 32 regarding the evaluation and selection process, row 10 on complying with the requirement to select LTRT Facilities by year 3, and row 34 regarding the requirement to provide justification for selection of LTRT Facilities]	35



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We require that TPs in each transmission planning region propose evaluation processes, including selection criteria, that seek to maximize benefits accounting for costs over time without over-building transmission facilities. We modify the requirement to require that TPs' evaluation processes and selection criteria seek to maximize benefits accounting for costs.	964			[see row 32]	36
We require TPs in each transmission planning region to consult with and seek support from Relevant State Entities regarding the evaluation process, including selection criteria, that TPs propose to use to identify and evaluate LTRT Facilities for selection. Specifically, we require TPs to demonstrate on compliance that they made good faith efforts to consult with and seek support from Relevant State Entities in their transmission planning region's footprint when developing the evaluation process and selection criteria that they propose to include in their OATTs. We do not require TPs to obtain their support, before proposing an evaluation process and selection criteria on compliance. Ultimately, it is TPs who must propose on compliance an evaluation process and selection criteria that comply with the requirements of this final rule	994 - 996	"Good faith efforts" standard is similar to a "reasonable efforts" standard. Order 1920 requires TPs to provide opportunities for Relevant State Entities to provide input on proposed processes and consider that feedback.	460	See row 32. By the time of the compliance filing, PJM will have consulted with PARSEC and sought the support of PARSEC.	37



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We require TPs in each transmission planning region to include in their OATTs a process to provide Relevant State Entities and interconnection customers with the opportunity to voluntarily fund the cost of, or a portion of the cost of, a LTRT Facility that otherwise would not meet the TPs' selection criteria.	1012	Order 1920 does not prohibit voluntary funding approaches that are not prescribed therein.	465	After the closing of the competitive window PJM will develop a Backstop Plan to address Core LT Needs. States and Project Developers will have the opportunity to commit to solutions not selected by PJM in the Backstop Plan. PJM will then take those commitments and develop a more efficient or cost effective Final Plan consisting of solutions for Core LT Needs and Additional LT Needs with commitments from interested states or Project Developers.	38



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We direct TPs to propose OATT provisions on compliance that describe: (1) the process by which the TPs will make voluntary funding opportunities available to Relevant State Entities and interconnection customers; (2) the period during which Relevant State Entities and interconnection customers may exercise the option to provide voluntary funding; (3) the method that TPs will use to determine the amount of voluntary funding required to ensure that the LTRT Facility meets the TPs' selection criteria; and (4) the mechanism through which TPs and Relevant State Entities or interconnection customers will memorialize any voluntary funding agreement. For any portion of the costs of a selected LTRT Facility that is <u>not</u> voluntarily funded those remaining costs must be allocated according to the applicable LTRT CA Method	1013			See row 38 for requirements 1 and 2. PJM will coordinate with the PJM Transmission Owners as to requirements 3 and 4.	39



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We will <u>not require</u> in this final rule, that TPs select any particular LTRT Facility—even where a particular transmission facility meets the TPs' selection criteria in their OATTs.	1026	Order 1920 does not require TPs to select any LTRT Facility, even where it meets the TP's selection criteria.	468	PJM's proposal includes the identification and selection of LTRT Facilities to address Core LT Needs	40
We require TPs in each transmission planning region to include in their OATTs provisions that require them—in certain circumstances—to reevaluate LTRT Facilities that previously were selected.	1048	Sustained	496	See row 42 below	41



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We direct TPs to revise their OATTs to require re-evaluation of any selected LTRT Facilities in the following three situations, subject to limitations that we set forth below: (1) delays in the development of a previously selected LTRT Facility would jeopardize a TP's ability to meet its reliability needs or reliability-related service obligations; (2) the actual or projected costs of a previously selected LTRT Facility significantly exceed cost estimates used in the selection of a LTRT Facility; or (3) significant changes in federal, federally-recognized Tribal, state, or local laws or regulations cause reasonable concern that a previously selected LTRT Facility may no longer meet the TPs' selection criteria.	1049	Sustained	497	PJM will re-evaluate selected LTRT Facilities in the following situations: (1) developmental delays that would jeopardize PJM's reliability needs or obligations (beyond PJM required in-service date); (2) significant cost increases; or (3) changes in laws or regulations such that a LTRT Facility may fail the selection criteria.	42



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We require TPs to include specific criteria in their OATTs that they will use to determine when one of these three situations occurs, thereby triggering the re-evaluation of a previously selected LTRT Facility. TPs must designate a point after which all selected LTRT Facilities will no longer be subject to re-evaluation	1050			PJM will re-evaluate whether a previously selected LTRT Facility continues to meet the selection criteria in the following circumstances: 1) When PJM becomes aware of a delay to a projected in-service date beyond the PJM required in-service date; 2) when PJM becomes aware of a significant change above thresholds as defined in accordance with PJM Manuals; and 3) when PJM determines that a significant change in laws or regulations has occurred.	43



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
TPs must describe the conditions under which they would remove a previously selected LTRT Facility from the regional transmission plan. First, re-evaluation on the basis of cost increases or significant changes in federal, federally-recognized Tribal, state, or local laws or regulations must be part of a subsequent LTRT Planning cycle following selection and must take into account not only the updated costs but also the updated benefits of the LTRT Facility. Second, must include mechanisms for tracking costs. Third, must seek to maximize benefits accounting for costs over time without overbuilding transmission facilities.	1052			Re-evaluations on the basis of cost increases will occur only in subsequent LTRTP Cycles following selection. If the in-service date for the LTRT Facility is in the second half of the 20-year planning cycle, re-evaluations on the basis of changes in law will occur in the current cycle. If the in-service date is not in the second half of the 20-year planning cycle, re-evaluations on the basis of changes in law will occur only in subsequent planning cycles. Re-evaluations on the basis of changes in law or cost increases will account for updated costs and benefits of the LTRT Facility, and will seek to maximize benefits accounting for costs over time without overbuilding.	44



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We require TPs to explain on compliance how the initial timing sequence for LTRT Planning interacts with existing RTP processes. First, TPs must address the possible interaction between the transmission planning cycle for LTRT Planning and existing Order No. 1000 RTP processes. Second, TPs must address the possible displacement of regional transmission facilities from the existing RTP processes.	1071	Sustained	509	The LTRTP Cycle will start with the meeting discussing RTEP assumptions to maintain consistency between the different planning processes. The LTRTP process will inform existing Order 1000 processes.	45



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We require TPs in each transmission planning region to propose on compliance a date, no later than one year from the date on which initial filings to comply with this final rule are due, on which they will commence the first LTRT Planning cycle.	1072	Set aside in part: TPs must propose a date no later than <i>two</i> years from the date on which compliance filings are due, on which they will commence the first LTRTP cycle. Regardless of the date that TPs propose on compliance, they must explain in their compliance filing why the proposed date on which they will commence the first LTRTP cycle is necessary and appropriately taiolored to regional transmission plan.	507-08	PJM is evaluating the proper timing to start the first LTRTP cycle to align with PJM's other planning processes	46



# Coordination between Interconnection and Order 1000 processes



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
We require TPs in each transmission planning region to revise the RTP processes in their OATTs to evaluate for selection regional transmission facilities that address certain identified interconnection-related transmission needs associated with certain interconnection-related network upgrades originally identified through the generator interconnection process	1106	Existing cost allocation methods adopted by TPs remain intact.	562	PJM will evaluate for selection projects addressing certain interconnection-related transmission needs as defined by Order 1920's requirements in the applicable Order No. 1000 process.	47
First, we require TPs to evaluate for selection regional transmission facilities to address certain identified interconnection-related transmission needs in their existing Order No. 1000 RTP and CA processes, rather than in LTRT Planning.	1107	Sustained.	516	See row <b>47</b> above	48



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Second, we require that an interconnection-related network upgrade associated with identified interconnection-related transmission needs must satisfy both the minimum cost and voltage criteria proposed in the NOPR to qualify for evaluation for selection.	1107	Sustained.	538	See row <b>52</b> below.	49
TPs must make the newly created interconnection capacity equally available to all interconnection and transmission customers consistent with the Commission's open access policy	1115			Newly created interconnection capacity will be equally available to all Project Developers and transmission customers consistent with the Commission's open access policy. PJM is already compliant with this requirement.	50



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
TPs should consider generator interconnection as a driver of Long-Term Transmission Needs on a forward-looking basis. We require TPs to incorporate seven specific categories of factors in their development of Long-Term Scenarios used in LTRT Planning, including Factor Category Six: generator interconnection requests and withdrawals.		Sustained	586	Consistent with the requirements related to Factor Category 6, PJM will consider future interconnection-related transmission needs as a driver of LTRT Needs in LTRT planning through the development of Long-Term Scenarios. See row 19 above.	51
We require TPs to evaluate for selection in their existing Order No 1000 RTP processes regional transmission facilities to address interconnection-related transmission needs that have been identified in the generator interconnection process as requiring interconnection-related network upgrades where: (1) the transmission provider has identified interconnection-related network upgrades in interconnection studies in at least two interconnection queue cycles during the preceding five years; (2) voltage of at least 200 kV and an estimated cost of at least \$30 million; (3) have not been developed and withdrawn; and (4) not in an executed generator interconnection agreement or in a generator interconnection agreement	1145	Modified as follows: 1) the transmission provider has identified interconnection-related network upgrades in interconnection studies in at least two interconnection queue cycles (or in at least two individual interconnection studies for TPs that use a first-come, first-served serial generator interconnection process); 2) voltage of at least 200 kV and an estimated cost of at least \$30 million; (3) identified need in two or more interconnection cycle queues (or two individual interconnection studies if TP uses a serial process) is withdrawn AND no more than five calendar years have passed between the date of the earlier interconnection request withdrawal and the later withdrawal; (4) not in an executed generator interconnection agreement or in a generator interconnection agreement; and (5) interconnection request withdrawals associated with the repeatedly identified interconnection-related tranmission need occurred no more than seven uears prior to the commencement date of the Order 1000 regional planning and cost allocation cycle.	544- 545	PJM will evaluate for selection in its existing RTEP processes regional transmission facilities to address interconnection-related needs that have been identified as requiring interconnection-related Network Upgrades where: 1) identified interconnection-related network upgrades in interconnection studies in at least two interconnection queue cycles; 2) voltage of at least 200 kV and an estimated cost of at least \$30 million; 3) identified need in two or more interconnection cycle queues is withdrawn and no more than five calendar years have passed between the date of the earlier interconnection request withdrawal and the later withdrawal; 4) not in an executed Generator Interconnection Agreement; and 5) interconnection request withdrawals associated with the repeatedly identified interconnection-related tranmission need occurred no more than seven years prior to the commencement date of the RTEP planning and cost allocation cycle.	52



## Alternative Transmission Technologies



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Require TPs in each transmission planning region to consider, in LTRT Planning and existing Order No. 1000 RTP processes, dynamic line ratings and advanced power flow control devices for each identified transmission need. In addition to dynamic line ratings and advanced power flow control devices, TPs must consider in LTRT Planning and existing Order No. 1000 RTP processes advanced conductors and transmission switching. Thus, TPs must consider: (1) dynamic line ratings; (2) advanced power flow control devices; (3) advanced conductors; and (4) transmission switching. We clarify that TPs must consider each of these enumerated technologies when evaluating new regional transmission facilities, as well as upgrades to existing transmission facilities.	1198	FERC does not require detailed production cost simulations to demonstrate costs and benefits of each alternative transmission technology for each existing transmission element, and TPs have flexibility to apply good engineering judgment to identify specific transmission elements that are likely candidates for specific enumerated ATTs. HOWEVER, TPs must consider ATTs for each identified transmission need during LTRTP and existing Order 1000 regional transmission planning processes.	598	For each identified transmission need in the existing RTEP processes and LTRTP process, a proposing entity will be required to consider (1) dynamic line ratings; (2) advanced power flow control devices; (3) advanced conductors; and (4) transmission switching. The proposing entity must provide an explanation regarding whether the technologies listed above were, or were not, included, and such explanation must be sufficiently detailed for stakeholders to understand. PJM will notify the proposing entity if the proposal is deficient and will provide opportunities to cure the deficiency. PJM will evaluate the inclusion or exclusion of these technologies based on the information provided and the proposing entity's justification as to whether or not such technologies should be used. PJM will also provide guidance and memorialize use cases where such technologies would not be appropriate.	53



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
TPs must identify with sufficient detail in their OATTs the point or points in a given process at which the TPs in the transmission planning region will consider the potential use of alternative transmission technologies	1205			For each identified transmission need in the existing RTEP processes and LTRTP process, PJM will consider, in accordance with the PJM Manuals (1) dynamic line ratings; (2) advanced power flow control devices; (3) advanced conductors; and (4) transmission switching. PJM intends to work with stakeholders on developing best practices which will be stated in the manuals for when ATTs would and would not be appropriate.	
Require that the determination include an explanation that is sufficiently detailed for stakeholders to understand why dynamic line ratings, advanced power flow control devices, advanced conductors, and/or transmission switching were or were not incorporated into selected regional transmission facilities	1214			See row 53 above.	55



## Local Transmission Planning Inputs



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Requiring, pursuant to FPA section 206, that TPs adopt, with certain modifications, the two reforms that the Commission identified in the NOPR: (1) enhance the transparency of local transmission planning processes; and (2) require TPs to evaluate whether transmission facilities that need replacing can be "right-sized" to more efficiently or cost-effectively address LT Transmission Needs identified in LTRT Planning.	1577	Sustained	819-821	See rows <b>[67-69]</b> below	66
Require TPs in each transmission planning region to revise the RTP process in their OATTs to enhance the transparency of: (1) the criteria, models, and assumptions that they use in their local transmission planning process; (2) the local transmission needs that they identify through the local transmission planning process; and (3) the potential local or regional transmission facilities that they will evaluate to address those local transmission needs. This requirement does not apply to asset management projects. However, nothing in this final rule prevents TPs from choosing to apply these requirements to asset management projects.		Sustained	856	PJM will coordinate with the PJM Transmission Owners to ensure that the processes currently outlined in Tariff, Attachment M-3 comply with Order 1920's enhanced transparency requirements.	67



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Require that the RTP process include at least three publicly-noticed stakeholder meetings per RTP cycle; 25+ calendar days between Assumptions, Needs, and Solutions meetings; TPs to publicly post the meeting materials no fewer than five calendar days prior to each of the three publicly-noticed stakeholder meetings		TPs are not obligated to incorporate stakeholder proposals or comments into transmission plans; ultimate responsibility remains with TP.	861	PJM will coordinate with the PJM Transmission Owners to modify the current Attachment M-3 process as needed to conform to the meeting requirements of Order No. 1920.	68
Require TPs to respond to questions or comments in a manner that allows stakeholders to meaningfully participate in these stakeholder meetings	1645			Stakeholders will continue to be provided an opportunity to speak, engage, and ask questions, as well as receive reasonable responses at Assumptions, Needs and Solutions meetings conducted pursuant to Attachment M-3.	69



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Require that, as part of each LTRT Planning cycle, TPs in each transmission planning region evaluate whether transmission facilities (1) operating above a specified kV threshold and (2) that an individual TP that owns the transmission facility anticipates replacing in-kind with a new transmission facility during the next 10 years can be "right-sized" to more efficiently or cost-effectively address a LT Transmission Need.	1677	Sustained	873	An in-kind replacement facility will be one that (1) replaces an existing facility that a Transmission Owner has identified as needing replacement; (2) results in no more than an incidental increase in capacity (applying existing precedent); and (3) is located on the same general route or uses/expands an existing right-of-way. A right-sized replacement shall be one that (1) meets the need to replace the existing facility on the in-kind replacement estimate list and the Long-Term need at the same time; (2) results in more than an incidental increase in capacity compared to the in-kind replacement; and (3) is located in the same general route or uses or expands the existing rights-of-way of the existing facility. See rows [71-76] below for additional proposal details.	



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Require that, sufficiently early in each LTRT Planning cycle, each TP submit its in-kind replacement estimates	1677			In-kind replacement estimates shall be those that are anticipated to need replacing over the next 10 years from the start of the LTRTP cycle. Transmission Owners must provide in-kind replacement lists before the analysis portion of the LTRTP cycle begins (e.g., February 2nd of Year 2)	
TPs must propose on compliance a threshold that does not exceed 200 kV	1677			All in-kind replacement facilities must be at least 200 kV and above.	72



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
This federal right of first refusal will apply to the transmission provider that included in its in-kind replacement estimate the existing transmission facility that the right-sized replacement transmission facility would replace, and extends to any portion of the right-sized replacement facility located within that transmission provider's retail distribution service territory or footprint, recognizing that any such portion must satisfy the definition of a right-sized replacement facility, as revised by this final rule, including that the right-sized replacement transmission facility is located in the same general route as, and/or uses or expands the existing rights-of-way of, the existing transmission facility	1702	Sustained.	825-827, 887-890	PJM's right-sizing compliance approach will include the following steps: (1) PJM and each Transmission Owner will meet to review the Long-Term Needs and in-kind replacement estimates; (2) PJM will determine what can reasonably be addressed through right-sizing before the competitive window opens. PJM will discuss its determinations with the TEAC, and incumbent Transmission Owners retain the right to address local needs not addressed through right-sizing; (3) PJM will post all Long-Term Needs, including posting for informational purposes only Long-Term Needs addressed through right-sizing. PJM will also post the right-sizing solutions and the in-kind replacement information associated with right-sizing solutions; (4) PJM will consider all solutions received through the competitive window and review the entire plan holistically. PJM will engage Transmission Owners on right-sizing in-kind replacement facilities as necessary before finalizing the LTRT Plan. Any modifications to right-sizing solutions will be discussed with the TEAC. PJM will publish the in-kind replacement estimates associated with the selected right-sizing solutions. The incumbent TO can exercise its right of first refusal with respect to the selected right-sizing solution.	



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Require TPs in each transmission planning region to amend their RTP processes to provide transparency with respect to which right-sized replacement transmission facilities have been selected, as well as which transmission facilities are simply included in the regional transmission plan for informational (and not cost allocation) purposes.	1717			see row <b>[73]</b> above	75



## Compliance Procedures



Order 1920 Compliance Obligation	Parag	Obligation as Affirmed or Modified by Order No. 1920-A	Parag	Compliance Plan	Row Number
Require each transmission provider to submit a compliance filing within ten months of the effective date of this final rule revising its OATT and other document(s) subject to the Commission's jurisdiction as necessary to demonstrate that it meets all of the requirements adopted in this final rule, except those adopted in the Interregional Transmission Coordination section of this final rule. Require TPs in each transmission planning region to propose on compliance a date, no later than one year from the date on which initial filings to comply with this final rule are due, on which they will commence the first LTRT Planning cycle (unless additional time is needed to align the first LTRT Planning cycles).	1768	Sustained	914	Compliance filing due on or before December 12, 2025	80



 Seek stakeholder feedback on the tracker at upcoming special TEAC – Order 1920

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