

Stakeholder Feedback to FRMSTF Framing Questions (Verbal and Written Survey)

Company	Feedback
4.1 Market Participation	
Q1. What criteria should be evaluated in determining whether a member application should be rejected?	
AEP	Consider a cross-default mechanism across RTOs; must remain in good standing across RTOs considering affiliates as well.
MMU	We need criteria, such as when there is security fraud or other enforcement against the company or an officer. Perhaps a passive investor does not need to be captured in the criteria. We should consider practices of other organizations.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Corporate history of compliance Financial standing criminal activities
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	Criteria beyond the annual application and financial information is necessary. On behalf of the members of the LLC, PJM should consider whether the applicant possesses the operational, managerial and technical fitness not to impose financial risk on other members of the LLC in the event of default. This necessarily includes background checks and review of the involvement of any principals in regulatory investigations for fraud.
Allegheny Energy Supply Company, L.L.C., American Transmission	Any previous trading violation; items/findings in a background check that cause concerns regarding Member application. Member company should be required to attest annually regarding fitness of employees (can be added as part of annual officer certification).

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<p>Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC</p>	<p>The current criteria are sufficient. PJM should follow the lead of other markets and develop sensible credit policies to control against defaults, NOT use the “member application” criteria as a misguided control against defaults. PJM should continue to encourage wide participation in its market by using the Appropriate Person test and requiring only a reasonable demonstration of market knowledge. PJM should NOT make sure of the Eligible Contract Participant (“ECP”) test, which requires \$10 million in gross assets, because that is a poor substitute for an intelligently designed credit policy (i.e. doesn’t prevent defaults like GreenHat, since a default of \$400m could still happen if all participants had over \$10m in assets) and would tend to diminish the competition in the market.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>We do believe PJM should be able to reject a member applicant, and we identify some specific criteria below. However, more important than the member application process is ensuring that PJM’s collateral rules do not incentivize risky trading activity with a likelihood of large defaults, as occurred with Green Hat (and Towers beforehand). In general, PJM should continue to promote open access, competition, and facilitate new members participating in the PJM markets. Unlike a private financial entity which can reject doing business with any market participant for virtually any reason, we believe PJM has an important role to play in facilitating competition and open access. As such, PJM should take an accommodating posture with respect to bringing on new members, but nevertheless attempt to validate that they know what they are doing and are and will be responsible market participants. We believe PJM should be able to reject a member applicant if they: a) Have a criminal record involving financial impropriety or are involved in a significant enforcement activity at FERC that involves gaming of ISO market rules or other material breaches of market behavior rules b) Have insufficient financial capacity c) Have insufficient experience or demonstrate inadequacy with respect to understanding and implementation of financial risk controls.</p>
<p>Arc Private Capital Inc.</p>	<p>There is a problem in the case of Greenhat that PJM continues to ignore. PJM failed to assess the risk inherent to the poor character of Greenhat’s leadership. The people involved had a track record of playing out of bounds to achieve personal enrichment without any</p>

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	concern for the impact on others. The current application process doesn't include any assessment of character. Had PJM investigated the track record of the people involved in Greenhat, they'd have uncovered a history peppered with questionable activity and FERC investigations.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	Failure to meet the minimum participation requirements, failure to meet the minimum capitalization requirements, or a questionable background check should be reasons that a member should not be able to participate in PJM markets.
Boston Energy Group, Inc.	In addition to current practice, PJM should develop a process that takes into account the past activity of company principals and limit or reject participation if major violations or FERC penalties have been imposed.
BioUrja Power, LLC	Criminal or Fraudulent activities in background check of principals. Insufficient ability to post credit.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	PSEG recommends a benchmarking effort with other ISOs, exchanges, and FCMs to review policies and procedures to determine best practices.

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CWP Energy Inc.	Credit, objectives
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	PJM should use the objective criteria known as the Eligible Contract Participant (“ECP”) test for determining whether a member should be allowed to participate in FTR auctions. Under the ECP test, most companies must demonstrate that they have \$10 million in gross assets or a corporate guarantee from an entity that does. The ECP test also includes a \$1 million tangible net worth test, but it is a limited exception available only to entities that limit their financial transactions to hedges. 7 U.S.C. § 1a(18)(A)(v)(III) (2019).
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	Check for criminal/SEC/FERC convictions: Key executives, key traders? (This depends on how you answer whether convictions should bar market participation, see below) Expertise? (This depends on whether you believe training should be a prerequisite to participation, see question below) Credit/Financing requirements (to be established and as per questions below)
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	<ul style="list-style-type: none"> •Creditworthiness check is a first step and, at a minimum, creditworthiness s/b checked annually. •Check for bad actor flags – as is current practice (SEC, FERC, CFTC; any other organizations where FTR traders might be listed.) •A cross-default mechanism (across RTOs) could be beneficial. If a member applicant shows up on a default list at another RTO, their application s/b rejected. •PJM should have a fully developed KYC policy with guidance on proper due diligence
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	We feel the criteria for membership only is adequate although some basic know-your-customer information could be an upgrade. Additional restrictions around FTR trading should be implemented.
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	There should be appropriate security requirements including background reviews encompassing activities in other markets.
East Kentucky Power Cooperative, Inc.	Audited financial statements a must; Financial ratios should meet a minimum of an implied strong solvency rating; physical address a must and not a P.O. Box; Partners, key personal background check to ensure they do not have any suspension, expulsion, bar, fine in excess of \$25k (CFTC/FERC/ other agencies). ICE has some language on violations/fines/ penalties on their member application.

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Elmagin Power Fund LLC	Minimum capitalization requirements, risk management policy.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	negative enforcement history, where they admitted guilt. criminal history suspension of prior trading and still in suspension period
Engelhart CTP (US) LLC	Credit
Entergrid Fund I LLC	creditworthiness
Forest Investment Group, LLC	1. any past or current disciplinary actions or investigations 2. credit history 3. more than 3 years PJM FTR market trading experience
Franklin Power LLC, Red Wolf PT, LLC,	The current criteria are sufficient. PJM should follow the lead of other markets and develop sensible credit policies to control against defaults, NOT use the “member application” criteria as a misguided control against defaults. PJM should continue to encourage wide participation in its market by using the Appropriate Person test and requiring only a reasonable demonstration of market knowledge. PJM should NOT make sure of the Eligible Contract Participant (“ECP”) test, which requires \$10 million in gross assets, because that is a poor substitute for an intelligently designed credit policy (i.e. doesn’t prevent defaults like GreenHat, since a default of \$400m could still happen if all participants had over \$10m in assets) and would tend to diminish the competition in the market.
Freepoint Commodities, LLC	market capitalization, collateral, credit
Hartree Partners, LP	Fraud in any financial market (including settlements without admission of guilt). They should also have to rep that their employees meet the criteria too
Lafayette Power LLC	Enough assests (\$10M) or enough liquid capital (\$3M)
Lantar Energy LLC	Minimum capital requirement
MAG Energy Solutions, Inc.	level of capitalization
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B	Members who are eligible to participate in PJM's markets should meet the requirements to transact set forth in the Commodity Exchange Act. Additionally, PJM should have the authority to deny any potential market participant or existing market participant whose directors, executives, or authorized traders have criminal records.

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Development, LLC.	
Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	financial criteria, background check
Office of the People's Counsel for the District of Columbia	PJM should follow best “know your customer” practices. This goes beyond an algorithmic application of quantifiable criteria. Entities should not be able to clear financial requirements by \$.01 and be considered fully vetted. PJM should have a good sense of the entities other means for liquidity beyond posted numbers. PJM should also consider whether there are any on-going or recent investigations or enforcement actions against an applicant, its parent or affiliate companies, or its senior management or material investors by FERC, the CFTC, SEC, or other applicable federal or state agency. While an investigation need not be disqualifying it should trigger further, extensive inquiry..
Old Dominion Electric Cooperative, TEC Trading, Inc.	Member status bar can be lower than what is required for market participation which should have a higher capitalization requirement. In particular, forward markets such as FTR are different by nature and require much different credit requirements. That said, PJM should do a better job of knowing their members from the beginning to better understand appropriate credit support that might be required.
Ontario Power Generation Energy Trading, Inc.	Company's credit rating and other business in PJM, history of the company's activity with other FERC jurisdiction markets i.e charged with any financial penalties or misconduct
Quattro Energy LP	Whether the principals/founders have been in lead position in the trading entities that bankrupted in the PJM market.
Rockland Electric Company, The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division,	PJM should follow best “know your customer” practices. This goes beyond an algorithmic application of quantifiable criteria. Entities should not be able to clear financial requirements by \$.01 and be considered fully vetted. PJM should have a good sense of the entities other means for liquidity beyond posted numbers. PJM should also consider whether there are any on-going or recent investigations or enforcement actions against an applicant, its parent or affiliate or affiliate companies, or its senior management or material investors by FERC, the CFTC, SEC, or other applicable federal or state agency. While an investigation need not be disqualifying it should trigger further, extensive inquiry.
Sanitas Power, LLC	Financial viability
Shell Energy North America (US), L.P.	Years of experience, background of principals, history in markets
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Credit worthiness Capitalization Background check for relevant adverse information

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Southern Maryland Electric Cooperative, Inc.	PJM should have the ability, per the page 17, FN 5 of the GreenHat Board report, to CME Group's Membership Application, for example requires an applicant to consent to a formal background check: "I understand that the CME Group Exchange may conduct, or cause to be conducted, an investigation into my character, general reputation, and personal characteristics and that the CME Group Exchange may retain a consumer reporting agency for that purpose. I also understand that, upon my written request, CME Group Exchange will disclose to me in writing the nature and scope of the investigation if conducted by a consumer reporting agency. I hereby authorize the Exchange to conduct an investigation as to my credit, character, general reputation, educational history and personal characteristics.", and use adverse info to reject a Member Application of a closely-held corp. or LLC applicant.
Strom Power, LLC	1) Partners/Members/Managers reputation and background check 2) Minimum company capitalization 3) review of internal company controls, people and processes.
Tenaska Power Services Co.	Financial stability Market knowledge qualifications Past market manipulation and other enforcement history
TrailStone Energy Marketing, LLC ** and TrailStone Power, LLC	Insufficient credit and/or capital support for position exposure
Velocity American Energy Master I, L.P.	Lack of adequate experience and knowledge in electricity markets. Prior FERC enforcement action if any should be taken into consideration in approving or rejecting the application
Vitol Inc.	PJM must evaluate several pieces of information in determining whether or not a member application should be accepted or rejected. These include: 1.Know-your-counterparty check on the applicant company, its parent company, its affiliates, and its officers/directors 2.Corporate structure 3.Ownership/shareholder structure 4.Prior history of legal/regulatory judgements and settlements 5.Creditworthiness, financial statements and capital resources 6.Risk management and compliance programs
Q2. How much discretion should PJM have in the rejection of an applicant, or termination of an existing member, because of unsatisfactory results in its background check, or that of its principals?	
Direct Energy	Identify what discretion refers to and what type of discretion, discretion to make a collateral call versus discretion to stop trading or take other actions. Look at other commodity trading entities to see what rules exist, as they relate to who can be admitted, as well as financial management.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC,	Complete discretion Let them file a complaint at FERC if they want to

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Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	Some degree of discretion is necessary as PJM reviews any application. The areas of discretion should be spelled out in PJM operative documents.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	PJM should have full discretion.

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Alphataraxia Palladium LLC	Very little discretion. PJM should have objective and clearly stated criteria for initial and continued market participation -- focused on credit, collateral, and risk management. Rather than excluding participants for past behavior, perhaps PJM should have the flexibility to require more onerous credit from participants that have defaulted in other markets or are run by those who have defaulted in other markets.
Appian Way Energy Partners MidAtlantic, LLC	We believe these should be judgement calls by PJM and not bright-line specific tariff criteria. Risk management should be flexible. Making these judgements requires that PJM do background checks, interview applicants, seek audited financials, and audit their risk protocols for proof of a risk process and risk reports. PJM should be seeking comfort that its members know what they are doing and are professional. PJM may want to require that companies demonstrate that they have done compliance training before approving them for financial trading.
Arc Private Capital Inc.	If there are clear violations, PJM should have full discretion. If the violations are less clear or somewhat opaque, then it could go to a committee vote of some kind.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	PJM should have more discretion to reject an applicant than it does today.
Boston Energy Group, Inc.	There should be solid guidelines as to how PJM determines the ineligibility or termination of membership, which should also include an appeal process that could be put to a board.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir	We support Direct's recommendation to look at other commercial trading entities. We believe as a fiduciary PJM should have some discretion for known material misconduct. The criteria for terminating an existing member should be clearly defined in the OATT.

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Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	
CWP Energy Inc.	Should follow predefined criteria, but may have veto power if the MP is found to be attempting to circumvent those criteria.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	PJM should have objective and clearly stated criteria for initial and continued market participation, in particular related to ongoing credit, collateral and risk management requirements. Providing PJM with the tools to address on an ongoing basis risk management generally and collateral or credit risks in particular is essential. PJM should have the necessary flexibility to respond to credit or collateral risk concerns based on objective criteria. However, whether a "bad actor" can participate in FERC-regulated markets should be determined by FERC through its rulemaking process on an industry-wide basis.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	PJM should have discretion to reject; can always be litigated at FERC Convictions should probably bar companies where they are executives or high level traders
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	•Discretion s/b defined. New applicants s/b rejected if they don't meet the creditworthiness standards or show up on a bad actor list. In the case of a new applicant, PJM should have full discretion. • Standards/practices at other RTO's or commodity trading entities s/b reviewed/considered.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	The PJM credit, market, and membership departments should have substantial discretion in rejection.

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Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy Power Marketing, LLC, and Vistra Energy **	PJM should establish clear guidelines in its tariff regarding disqualifying activities or events, and should have full discretion to reject or terminate a member who is not in compliance with those guidelines.
East Kentucky Power Cooperative, Inc.	Create a separate panel of 7 experts that meets once a month to review such decisions. The decision of the panel shall be final.
Elmagin Power Fund LLC	None; I am uncomfortable with the generality of "unsatisfactory" and how much is left up to interpretation.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	I think PJM should outsource this function to a third party that does Know Your Customer routinely and already has established rules in place.
Engelhart CTP (US) LLC	There should be set rules/criteria. It should not be at the discretion of PJM.
Entergrid Fund I LLC	none
Forest Investment Group, LLC	100%
Franklin Power LLC, Red Wolf PT, LLC,	Very little discretion. PJM should have objective and clearly stated criteria for initial and continued market participation -- focused on credit, collateral, and risk management. Rather than excluding participants for past behavior, perhaps PJM should have the flexibility to require more onerous credit from participants that have defaulted in other markets or are run by those who have defaulted in other markets. Whether a "bad actor" can participate in FERC-regulated markets should be determined by FERC through its rulemaking process on an industry-wide basis.
Freepoint Commodities, LLC	Very little, the process should be highly objective and not involve subjective decisions.
Hartree Partners, LP	Should be presented to a "members review" committee. Should probably not just rest with PJM
Lafayette Power LLC	It should 100% have the capability to reject applicants that dont satisfy the requirements or failed tests.
Lantar Energy LLC	Limited discretion

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MAG Energy Solutions, Inc.	Very transparent
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	The rules should be clear and followed. If there is the need for any discretion, the applicant or existing member should have recourse at FERC.
Northstar Capital Management Inc. **, Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	PJM should have discretion in rejecting applicants or existing members provided these members are given an opportunity to refute any claims made by PJM. In the event of a dispute, an independent arbitrator may be required.
Office of the People's Counsel for the District of Columbia, Rockland Electric Company, The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	PJM should have broad discretion to reject applicants for questionable history or lack of robust financial backing. Key factors: how liquid is the entity? How would they fund collateral? PJM should also have broad discretion to suspend or terminate existing members whose financial condition deteriorates to the point that they can no longer post collateral requirements or are subject to any on-going or recent investigations or enforcement actions.
Old Dominion Electric Cooperative, TEC Trading, Inc.	PJM should have exclusive discretion in rejection of an applicant.
Ontario Power Generation Energy Trading, Inc.	full discretion with decision supported by the PJM management team
Quattro Energy LP	Should have discretion to reject if the background of principals are connected to indicted illegal trading activities or involved in bankruptcy in PJM before.
Sanitas Power, LLC	None. Spell out the criteria explicitly and govern by that.
Shell Energy North America (US), L.P.	Modest discretion as some is required. PJM must be consistent and clear about rationale for rejections
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	PJM should have clear criteria for applicants and current members. Concerns about relevant adverse information should be forwarded to FERC.

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Southern Maryland Electric Cooperative, Inc.	See Q1 response
Strom Power, LLC	1) full discretion
Tenaska Power Services Co.	PJM should have significant discretion in this area with appeal to the BOD or another committee.
Velocity American Energy Master I, L.P.	PJM should have considerable discretion and be the final authority in this matter
Vitol Inc.	PJM should have clearly established guidelines for participating in its markets, but with a limited level of reasonable, qualified discretion. If PJM finds in its evaluation of applicants or in its on-going assessment of existing members that there are violations of these guidelines or other red-flags, PJM should provide in writing the basis for its concerns and allow for the applicant or existing member to address/cure these concerns. If after this PJM still has concerns, then the applicant or existing member should have the right to an immediate appeal process.
Q3. The Report suggests an internal appeal mechanism (C3.1). What is the right body for appeals to be made to?	
Exelon	The committee needs to include both the CRO and CFO.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Independent entity under contract to the PJM Board. Entity should pay for costs if they lose appeal
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA,	Yes. The Committee should include General Counsel and the CRO; it should be appealable to FERC.

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<p>MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	<p>PJM could hire an ombudsman or create a special appeals committee. This should be discussed further by FRMSTF.</p>
<p>Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,</p>	<p>The PJM board and/or the FERC Alternative Dispute Resolution (“ADR”) process. PJM should have FERC approved Operating Agreement language regarding appeals and any appealing entity should have the right to have its appeal heard via the FERC ADR process.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>The goal of the appeal should be to ensure that the decision to not approve a member is not arbitrary and capricious. Perhaps it would be appropriate to include a delegate from each voting sector on the committee, along with a few senior staff from PJM legal and Markets groups and someone from IMM. The hearing would include a PJM Risk Group presentation regarding why the member was rejected and a presentation from the appealing company as to why the decision was erroneous.</p>

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Arc Private Capital Inc.	Form a committee.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	A potential appropriate body of appeals would be some committee that includes both the PJM CRO and CFO.
Boston Energy Group, Inc.	I believe the appeal process should include a designated board from PJM as well as an independent opinion, possibly the market monitor?
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	An appeals body should be formed that includes the PJM CRO, CFO and 5-10 of the largest market participants (they have the largest interest in default issues).
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	Not sure – could take it to entire membership; always have the FERC option

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<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>•Risk Oversight Committee - comprised primarily of risk professionals</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>There should be a higher body at PJM that can hear appeals and it should include at least some external expertise (subject matter expert).</p>
<p>Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **</p>	<p>If qualification guidelines are established in the tariff then a member would be able to appeal to FERC if it contested PJM's application of its rules.</p>
<p>East Kentucky Power Cooperative, Inc.</p>	<p>Create a separate panel of 7 experts that meets once a month to review such decisions. The decision of the panel shall be final.</p>
<p>Elmagin Power Fund LLC</p>	<p>No opinion - I don't intricately understand the PJM corporate structure.</p>
<p>Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC</p>	<p>A committee could be put together for an appeals process. This could include a member from PJM legal, an outside law firm, a board member and a few select members.</p>
<p>Engelhart CTP (US) LLC</p>	<p>C2:1 states: Create an internal appeal mechanism in order to address any claims of any undue discrimination swiftly without unnecessary involving FERC. PJM Observations: PJM Agrees that an appeal mechanism should be established to address any claims undue discrimination by new applicants who have been denied membership to PJM, or existing participants who's trading rights have been revoked. Currently, the only redress is to file a complaint with FERC. PJM looks forward to working with members to identify the right body</p>

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	to deal with appeals.
Entergy Fund I LLC	I don't know
Forest Investment Group, LLC	A body formed by representatives from PJM risk management group (under the leadership of CRO), PJM Credit, and PJM FTR Group.
Freepoint Commodities, LLC, Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC., Velocity American Energy Master I, L.P.,	FERC
Hartree Partners, LP	Members Review Committee
Lantar Energy LLC	No preference
Northstar Capital Management Inc. **, Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	PJM Market Monitor or some sort of clearly distinct entity
Office of the People's Counsel for the District of Columbia	Exelon makes a good suggestion that an appeals body should include the CRO and CFO. It should also include an appropriate member(s) of the PJM Board and perhaps a pre-selected representative from each sector.
Old Dominion Electric Cooperative, TEC Trading, Inc.	The CRO or a Risk Management Committee comprised of PJM staff.
Shell Energy North America (US), L.P.	Independent committee that includes PJM FTR expert, CRO, CFO, GC and an outside expert from financial markets
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	PJM Board of Directors
Southern Maryland Electric Cooperative, Inc.	The Commission

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Tenaska Power Services Co.	Maybe the Members Committee?
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Appeals should be to the PJM Board. At a minimum it should have a good sense of who the entity is: is it a real company? Does it have a reputation? Any black marks? Is it a hedger or speculator? Have the participants been in trouble before?
Vitol Inc.	For internal appeals, the appropriate body is the Board of Managers. Ultimately, however, any applicant or existing member should have the right to pursue an expedited appeal at the FERC.
Q4. What sort of test could PJM employ – beyond just confirming their existence – to form a meaningful assessment of participant risk management processes?	
Exelon	PJM should have a third party assess participant risk management processes for new members (i.e. perform background checks on new members). A new certification is not enough. There needs to be an ongoing process including FERC 741 data submitted by companies. Potential flags could include legal actions against principals, sanctions against principals, and others.
Public Power	Requested education on what is working in other markets and commodity markets; is there another standard for how the other markets would evaluate the quality?
AEP	Consider bifurcating the type of participant relative to this question – ask if it is hedging versus speculative behavior.
DC Energy	Bifurcation may not be possible or easily delineated. How would PJM determine if a member is it is hedging or speculative? Many participants are performing both.
SMECO	The CME Membership criteria section in the report should be held to closely.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Don't think that PJM should evaluate. If they post enough collateral, what difference should it make if they don't know what they are doing?
Air Products & Chemicals, Inc.,	PJM should employ tests or criteria like that used by clearing houses. At a minimum, PJM could directly, or through a third party, engage

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<p>ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	<p>in background checks. For example, services such as Lexis Diligence or review of courthouse records are readily available.</p>
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	<p>Consider recommendations from Independent Consultants report. TBD - Should be discussed further by FRMSTF.</p>
<p>Alphataraxia Palladium LLC</p>	<p>As is done in other markets, PJM should periodically verify that each market participant has a risk management function with responsibility for implementing the market participant’s written risk management policies submitted to PJM. PJM could perform risk management audits of a select sample of random market participants each year and/or reserve the right to perform a risk management audit of any market participant for which it has a reasonable basis. Additionally, part of that risk management function should include the ability to mark open</p>

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	positions to latest market prices.
Appian Way Energy Partners MidAtlantic, LLC	This is a basic auditing function...for instance asking to see specific reports that are part of the risk process. The Chief Risk Officer, once hired, should be able to establish what the auditing should look like for the risk management process. This can be a question to ask when you interview candidates for the role.
Arc Private Capital Inc.	Scenario analysis (how would your organization handle situations A through H?). Stress testing (if your organization suffered a loss of \$XXX, what impact would it have on your ability to operate? To settle your obligations? What mechanisms are in place to avoid a loss of a magnitude that would impede your operations of payment obligations?)
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	PJM should have a third party perform background checks on all new PJM members. PJM's recent enhancement of adding a new certification to disclose if the party is involved in an ongoing SEC, FERC, CFTC investigation is not enough. There also needs to be an ongoing mechanism to verify that the members continue to be in good standing. PJM should also be reviewing all FERC 741 data that is submitted by members. Potential flags could include previous bankruptcies by the company or the principals, pending legal action against the company or its principals, prior criminal convictions of the principals, CFTC sanctions, incarceration of the principals, etc.
BioUrja Power, LLC	PJM should improve risk metrics on their end. Follow 3rd party recommendations on credit policy - currently the policy is ineffective for controlling risk. Positions and credit requirements should be re-calculated at each auction. Credit should reflect position risk instead of extreme bias towards long positions which distorts the market and ultimately makes long positions more risky.
Boston Energy Group, Inc.	I don't believe that PJM, beyond confirming the existence of a risk policy, should interfere with company risk management.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade	PSEG recommends a benchmarking effort with other ISOs, exchanges, and FCMs to review policies and procedures to determine best practices.

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<p>LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	
<p>CWP Energy Inc.</p>	<p>Conduct periodic stress tests, or ask for results of internally conducted stress tests.</p>
<p>DC Energy Mid-Atlantic, LLC, DC Energy, LLC</p>	<p>PJM should periodically verify that each market participant has a risk management function with responsibility for implementing the market participant's written risk management policies submitted to PJM. PJM could perform risk management audits of a select sample of random market participants each year and/or reserve the right to perform a risk management audit of any market participant for which it has a reasonable basis.</p>
<p>Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC</p>	<p>Everyone is asked to submit and certify to risk management policy – but how do you ensure that it is enforced?</p>
<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>•Proper due diligence and decision making should be performed in house. •CME Membership criteria should be explored but may be more applicable to applicant's plans for membership – e.g. hedging vs speculative behavior.</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>PJM should have the ability to request documentation to complete an audit-like review of a member's risk management policies. For example, PJM could request copies of organizational charts or other documentation to demonstrate appropriate capabilities exist.</p>
<p>Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy</p>	<p>We note that ERCOT has an annual re-certification process, which requires market participants to make several attestations and ERCOT or a third party to verify the market participant's risk management framework.</p>

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Power Marketing, LLC, and Vistra Energy **	
East Kentucky Power Cooperative, Inc.	References would be a good start. financial ratios ; equity metrics for lou's, Munis/ Coops, trading based on industry norms; existence of independent risk management function
Elmagin Power Fund LLC	Classes and a continuing credit system for the FERC-mandated head risk officers.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	random audits, similar to the ones conducted today but perhaps a bit more rigorous.
Entergrid Fund I LLC	none -- the collateral should be enough to cover the losses
Forest Investment Group, LLC	Tenor test. If a (future) participant is expecting to participate in the FTR market with long tenors (other than the prompt month), the participant would be more riskier. Tower Research and GreenHat all had long-term FTRs. Acutually, their long-term FTRs caused their default and larger impact on other market participants.
Franklin Power LLC, Red Wolf PT, LLC,	As is done in other markets, PJM should periodically verify that each market participant has a risk management function with responsibility for implementing the market participant's written risk management policies submitted to PJM. PJM could perform risk management audits of a select sample of random market participants each year and/or reserve the right to perform a risk management audit of any market participant for which it has a reasonable basis. Additionally, part of that risk management function should include the ability to mark open positions to latest market prices.
Freepoint Commodities, LLC	Internal audit, asking for risk plan documents from participants, etc.
Hartree Partners, LP	Usually this is a clearing agent function. What do other clearing agents do?
Lantar Energy LLC	3rd party certification
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B	PJM has no credible expertise in financial risk management. Until it possesses that expertise, it is ill-positioned to design, administer, or interpret the results of any such test.

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Development, LLC.	
Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	Asking participant to describe how their existing processes would intercept or mitigate common risk scenarios (e.g., concentrating MWs in a path or zone, taking too large of a position, assessing risk when there is not adequate historical data, fat finger mistake, etc.)
Office of the People's Counsel for the District of Columbia	PJM should conduct extensive background checks of any new applicant that includes both financial and credit worthiness as well as legal and regulatory due diligence. Background checks should also be conducted of any applicant's parent or affiliate companies, or its senior management or material investors. Cost of such background checks should be rolled into application fees. PJM should also conduct occasional reviews of existing members. These reviews could either be "spot" or precipitated by known financial issues (like difficulties meeting collateral requirements), new government investigations or enforcement actions, or information provided in the trade press.
Old Dominion Electric Cooperative, TEC Trading, Inc.	We want to see SEC registrant, appropriate capitalization, investment grade credit ratings or collateral, criminal background, etc – use risk management best practices.
Presto Energy LP	For existing market participants, based on past historical performance. For new market participants, based on whether its employees have sufficient experience; if no experience, PJM can limit trading size initially and gradually increase the size as more past performance is obtained.
Quattro Energy LP	PJM could check that the RM document includes at least: 1. Existence of Risk metrics for credit and liquidity risk, as well as market risk in the policy. The risk metrics need to be quantifiable and based on possible outcomes of trades rather than on ex-ante values. 2. The existence of a risk management head, who can be called upon to discuss their RM policy by PJM either on a random basis (say 5% of the participants every year) or when PJM suspects risk tolerances are exceeded 3. The existence of procedures to Mark 2 Market the risk of non-prompt portfolios.
Rockland Electric Company	At a minimum it should have a good sense of who the entity is: is it a real company that is a going concern or a newly created LLC? Does it have a reputation? Any black marks? Is it a hedger or speculator? Have the participants been in trouble before?
Sanitas Power, LLC	Risk management document review.
Shell Energy North America (US), L.P.	KYC is performed at many companies. PJM should consider reaching out to members that have large trading operating to learn about procedures that they use
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual,	PJM could request internal risk management documents from market participants as part of random audits.

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LLC	
Southern Maryland Electric Cooperative, Inc.	See Q1 response
Strom Power, LLC	New participants should be subject to additional scrutiny on risk management controls audits to satisfy the manual requirements.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	<p>PJM should conduct extensive background checks of any new applicant that includes both financial and credit worthiness as well as legal and regulatory due diligence. Background checks should also be conducted of any applicant's parent or affiliate companies, or its senior management or material investors. Cost of such background checks should be rolled into application fees.</p> <p>PJM should also conduct occasional reviews of existing members. These reviews could either be "spot" or precipitated by known financial issues (like difficulties meeting collateral requirements), new government investigations or enforcement actions, or information provided in the trade press.</p> <p>We would recommend a tiered system with limitation on participation and portfolio size commensurate with the entities reputation and financial backing. PJM should have broad discretion to place entities into tiers. Activity should be limited to the notional value of the positions and to the level of funding liquidity under reasonable market stress scenarios</p> <p>Stricter limits should be placed on FTR participants as compared to other cash markets. FRT markets carry more exposure outside of the position holders control. The contract term and notional value also increase potential exposure.</p>
TrailStone Energy Marketing, LLC ** and TrailStone Power, LLC	Credit Support, Capital Support and Organizational Qualifications
Velocity American Energy Master I, L.P.	Assess the performance and risks and any enforcement action or even referrals to FERC from MMU of the principals as well as direct market participants within an entity
Vitol Inc.	First and foremost, PJM needs to have qualified staff who thoroughly understand risk management practices in order to make any judgement regarding a participant's risk management processes. In assessing risk management processes of applicants and existing members, PJM should review all procedures sent to them and evaluate the substance of the procedures. If there are concerns, PJM should conduct an interview with the entity, and if necessary, conduct an on-site visit.
Q5. Should stricter criteria be applied for participation in FTR and other financial markets, as compared to cash/spot market participation?	

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DC Energy	It should be comparing the risk profile differences by product so the question is should the financial requirements be stricter for portfolios with different risk profiles matching size, tenure, etc.
Nodal Exchange	Exchanges don't operate by themselves. It is a false comparison of what PJM could do versus what they could do by an exchange. It's a two-tiered risk structure that does the "know your customer" function versus guaranteeing the performance of the players. It's a community that works together to solve this problem. After baseline by CFTC but embellished by the clearing members as appropriate. All clearing members have criteria.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Equal risks should be treated equally. Proportionally greater risks should see proportionally greater collateral.
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	To date, most defaults in PJM requiring a default allocation assessment have been with respect to the FTR market participants. As such, yes – stricter criteria should be applied for FTR market participation.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, Enel Trading North America, LLC, FirstEnergy Solutions Corp., Freepoint Commodities, LLC, Jersey Central Power & Light Company, Lafayette	Yes

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<p>Power LLC, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Northern States Power Company, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Quattro Energy LP, Toledo Edison Company, TrailStone Energy Marketing, LLC **, TrailStone Power, LLC, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC</p>	<p>No. Appropriate collateral policies are more important than gating access to markets. We believe the appropriate person standard is the correct one for market access. The extent of participation should be limited by the ability of an entity to post appropriate collateral for the risk associated with the positions they hold. There are clear lessons that have emerged on the shortcomings of the collateral policy: like allowing long-term financial positions to be acquired with very small amounts of required collateral or allowing one long-term position to inappropriately reduce the collateral of another long-term position. Fix the credit policies, don't restrict participation and competition.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>The criteria for FTR vs. cash market participation does not necessarily need to be "stricter," but rather needs to be appropriate for the type of trading. This is ALL about having the appropriate level of collateral for the activity. For instance, with PJM's reserve pricing reforms, cash/markets will be more volatile and may require stricter collateralizations, but the spot markets only impact a short duration while the FTR markets are longer duration. The most important thing with new members and all members is that PJM require sufficient financial collateral to ensure that the market participant will be able to cover their likely future financial obligations. Both the Towers and Green Hat defaults occurred when Fly-by-Night companies were able to participant at a massive level without any material "skin in the game." If PJM gets the proper level of "initial margin" for FTR trading, it will be protected from a meaningful default. Since FTR trading involves longer duration of futures, this will inherently be different (but not necessarily stricter) from the collateral required for cash trading.</p>
<p>Arc Private Capital Inc.</p>	<p>No. Why stricter? Maybe it's less strict, more strict of the same. That's a silly way to frame this question. Why not find the best practice for the product in question?</p>
<p>Atlantic City Electric Company,</p>	<p>Yes, Exelon is comfortable with the current rule set that has slightly different minimum capital requirements for FTR participants, virtual</p>

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Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	participants, and all other participants.
Bancroft Energy LLC, Entegrid Fund I LLC, Guzman Energy LLC, Hartree Partners, LP, Lantar Energy LLC, Presto Energy LP, Southern Maryland Electric Cooperative, Inc., Tenaska Power Services Co.	No
BioUrja Power, LLC	Possibly. Longer duration positions have more risk so should require more credit & more scrutiny of participants expected ability to cover their long term obligations.
Boston Energy Group, Inc.	No. I believe that in developing a stronger membership process, PJM should be able to curtail the participation of "bad actors", whether it is in gaining or retaining access to the markets.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen	Yes – the material defaults in PJM have been in the FTR market and the defaulting entities have been hedge funds not entities with assets in PJM. The ERCOT market has addressed similar issues.

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Energy Marketing, LLC, York Generation Company, LLC	
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	The criteria should match the tenor and risk associated with the product for any market participants size of activity.
CWP Energy Inc.	Sure, longer duration implicitly has less liquidity.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	The metric should not be FTR/financial markets vs other cash spot markets. Instead, the objective and clearly stated requirement should be based on the size and tenure of positions. For example, the capitalization requirement for a 3-year RPM position should be similar to the capitalization requirement for a 3-year FTR position.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	•Yes – guidelines s/b more stringent for this level of participation.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	FTR participation should be subject to background checks and position limits based on capitalization.

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Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy Power Marketing, LLC, and Vistra Energy **	No, because stricter collateralization requirements should mitigate the risk.
East Kentucky Power Cooperative, Inc.	Both should have similar stringent requirements
Elliott Bay Energy Trading, LLC	No. All of PJM's markets create the risk of a default that will be collectively borne by PJM members. Participants in all markets should thus be held to the same participation standards.
Elmagin Power Fund LLC	No - not necessary.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	No, a default can occur in any market. The rules should apply to all market participants equally, otherwise it would be unduly discriminatory and violate the Federal Power Act.
Forest Investment Group, LLC	The following stricter criteria should be applied: 1. any past or current disciplinary actions or investigations 2. credit history 3. more than 3 years PJM FTR market trading experience
Franklin Power LLC, Red Wolf PT, LLC,	No. Appropriate collateral policies are more important than gating access to markets. We believe the appropriate person standard is the correct one for market access. The extent of participation should be limited by the ability of an entity to post appropriate collateral for the risk associated with the positions they hold. There are clear lessons that have emerged on the shortcomings of the collateral policy: like allowing long-term financial positions to be acquired with very small amounts of required collateral or allowing one long-term position to inappropriately reduce the collateral of another long-term position. Fix the credit policies, don't restrict participation and competition.
Macquarie Energy, LLC	Customize the stricter criteria in line with portfolio risk and posted collateral. Continue to allow use of parental guaranties to meet minimum criteria.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	The amount of collateral required and the form of that collateral should be commensurate with the risk the market participant poses to the remainder of the market.

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Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	No. Stricter criteria for cash/spot market participation.
Office of the People's Counsel for the District of Columbia, Rockland Electric Company	Stricter limits should be placed on FTR participants as compared to other cash markets. FRT markets carry more exposure outside of the position holders control. The contract term and notional value also increase potential exposure.
Old Dominion Electric Cooperative, TEC Trading, Inc.	Yes, with emphasis on collateral requirements for initial and variation margin.
Ontario Power Generation Energy Trading, Inc.	yes since longer term positions create more risk. the criteria should match the risk taken on by PJM
Sanitas Power, LLC	I cannot answer this because I am not familiar with existing cash/spot market criteria.
Shell Energy North America (US), L.P.	For LT FTRs, there should be stricter criteria
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	The criteria should not be dependent on products, it should be determined by the risk and term of the products. Longer duration products should have higher requirements.
Strom Power, LLC	No. Collateral requirements are already extremely broad and effective; after the additional of transmission upgrades, \$0.10 cents minimum per MWh and M2M. We would strongly advise to eliminate the undiversified variable as it doesnt correlate to risk and prevents optimal price discovery.
The Highlands Energy Group, LLC	We believe the recently enhanced FTR credit requirements already are essentially creating stricter participation.
Velocity American Energy Master I, L.P.	The current criteria for participation from financial standpoint is adequate but assessment of qualitative risks is not adequate
Vitol Inc.	No. The same criteria should be applied to all markets and market participants.
Q6. What is a reasonable minimum level of capitalization in order to participate in financial markets?	

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AEP	If you have a margin call, due to an increase in exposure then you have to have the cash or cash equivalents to meet that. Net worth isn't as important versus do you have the cash. Composition of capitalization is much more important.
DC Energy	Requested PJM to review their FERC complaint for their feedback on this question.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	\$5M
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	It is too early to opine on the appropriate minimum level, but it would be reasonable to establish a minimum level of capitalization to participate in financial markets. We suggest that the minimum level of capitalization be linked in some fashion with the market participation and credible risk posed to members' based on that participation.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH	Minimum demonstrated net worth of \$10,000,000.

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<p>Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC, Franklin Power LLC, Red Wolf PT, LLC</p>	<p>The current minimums are sufficient. Appropriate collateral requirements are a more appropriate way of managing risk. The requirements and risk profile for a one-hour virtual energy transaction is fundamentally different than that of an annual or longer-term FTR position, and thus the collateral requirements across those positions should be different. The most important question is whether an entity has posted sufficient capital with PJM to support their positions, NOT whether the entity has capital greater than some arbitrary threshold. The Appropriate Person standard that has worked so well in other markets is more than sufficient for PJM. Don't focus on the minimum level of capitalization, focus on the correct credit rules.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>PJM currently has minimum capitalization requirements that are appropriate for participants who are small players. PJM might consider increasing the minimum bond for participating in FTR markets. PJM needs to ensure that its initial margin requirements are appropriate so that participants that take on more risk must post sufficient collateral to cover the risk. PJM may want to consider having a limit on the participant's notional value of the portfolio size measured against their balance sheet.</p>
<p>Arc Private Capital Inc.</p>	<p>That's a silly question. It should always be based on the level of participation. A financial participant with limited capital can participate less. A financial participant with greater capital can participate more. The corner store is allowed to exist even if it will never become a Walmart.</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC,</p>	<p>The current minimum capitalization requirements are sufficient if the capital/collateral is appropriately verified.</p>

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Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	
Boston Energy Group, Inc.	I believe the current minimum capitalization is fair. Raising the minimum could create barriers to competition and lowering it could invite participants to create a number of small, minimally capitalized companies to leverage the lower requirement. The latter should be able to be regulated with an improved membership process.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	The current criteria used to evaluate creditworthiness (total net worth and total assets) may not be sufficient in the event of a default. Suggest a tiered structure to include additional collateral requirements.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	A minimum capitalization level should be required to participate. PSEG recommends a benchmarking effort with other ISOs, exchanges, and FCMs to review policies and procedures to determine best practices.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	The minimum level of capitalization should vary based on tenor and size of a portfolio. The requirements and risk profile for a one-hour virtual energy transaction is fundamentally different than that of an annual or longer-term FTR position. The capitalization requirement to participate in the Annual or Long-Term FTR markets on a speculative basis should be based on the ECP definition, which, for speculative activity, generally requires assets of at least \$10 million, or a guarantor that meets this standard.

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<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>•Guidelines established by the Credit Subcommittee in Fall '18 seem reasonable. •What's reasonable depends on the activity and potential exposure. Many FERC tariffs tie credit/exposure limits to a % of TNW/Capitalization.</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>he position a member can take should be limited based on that member's capitalization and/or credit rating.</p>
<p>Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **</p>	<p>A market participant must be able to satisfy creditworthiness requirements including maintaining financial security at or above its total potential exposure less financial security.</p>
<p>East Kentucky Power Cooperative, Inc.</p>	<p>\$50 to \$200 MM. you could limit trading positions if participant does not have the minimum capital requirement.</p>
<p>Elliott Bay Energy Trading, LLC</p>	<p>PJM's current minimum capitalization requirements would be adequate to protect market participants from the risk of default if further refinements were made to PJM's position based collateral requirements. It is not necessary for small companies with small positions to be highly capitalized. PJM's credit rules should be designed to ensure that companies with limited capitalization cannot acquire large portfolios, not to exclude such participants from the market if they would like to acquire small portfolios that are appropriately sized for their level of capitalization.</p>
<p>Elmagin Power Fund LLC</p>	<p>Too broad of a question to answer here.</p>
<p>Enel Trading North America, LLC</p>	<p>5 million us dollars</p>
<p>Energy Trading Institute** (a coalition</p>	<p>It depends on the level of participation. If I am transacting a small volume in the day-ahead market, my capitalization can be less than if I</p>

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of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	am participating in the 3 year auction. Capitalization should be based on transaction limits.
Engelhart CTP (US) LLC	Increase Capitalization to 10M from 5M.
Entegrid Fund I LLC	none -- require enough collateral
Forest Investment Group, LLC	The current PJM minimum level of capitalization requirement is reasonable, except for non-prompt-month and long-term FTRs. Only non-prompt-month and long-term FTRs needs more capitalization than current requirements.
Freepoint Commodities, LLC	this should not be a fixed level but relative to the exposure of a market participant. If they are only trading 5MW, the market capitalization does not need to be so high.
Hartree Partners, LP	What do other clearing agents do? I have no sense but i would think it should be something like max change in position value from one FTR auction to the next.
Lafayette Power LLC	See Q1
Lantar Energy LLC	\$500,000
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	The minimum collateral required must be tied to the type of risk imposed. For example, participation in long-term FTR markets poses a substantially different risk than that posed by generators who limit their trading to capacity, energy, and ancillary service markets.
Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	\$1MM Tangible Net Worth seems reasonable.
Office of the People's Counsel for the District of Columbia	We would recommend a tiered system with limitation on participation and portfolio size commensurate with the entities reputation and financial backing. PJM should have broad discretion to place entities into tiers. Activity should be limited to the notional value of the positions and to the level of funding liquidity under reasonable market stress scenarios.
Old Dominion Electric Cooperative,	Not just capitalization – also profitability and just plain posted collateral.

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TEC Trading, Inc.	
Presto Energy LP	\$1 million capital. It is reasonable to limit maximum trading size for smaller players, especially new players, but too much capital requirement reduces the competition.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	Analysis of historical and future projections of congestion should be the determination of this question.
Quattro Energy LP	1 million USD
Rockland Electric Company	We would recommend a tiered system with limitation on participation and portfolio size commensurate with the entities reputation and financial backing. PJM should have broad discretion to place entities into tiers. Activity should be limited to the notional value of the positions and to the level of funding liquidity under reasonable market stress scenarios. Questionable entities, if not rejected, should be placed in the lowest tier so that even in a default scenario will not cause significant financial damage to the PJM marketplace.
Sanitas Power, LLC	\$1,000,000
Shell Energy North America (US), L.P.	It depends on the markets. For LT FTRs above a certain volume more than \$1,000,000 is necessary.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Minimum capitalization it should be determined by the risk and term of the portfolio. It may be reasonable to have requirements in excess of the current \$1M requirement assuming longer duration products or larger portfolios.
Southern Maryland Electric Cooperative, Inc.	Sufficient to address MTM swings (in FTR markets, for instance).
Strom Power, LLC	\$10M
Tenaska Power Services Co.	\$1 Million in tangible net work or \$10 Million in assets is sufficient to participate and consistent with the requirements of other financial markets. Position and tenor limits can be considered for risk mitigation.
The Highlands Energy Group, LLC	The current \$1 million is standard and acceptable level of capitalization. The actual FTR credit rules should be strong enough. We feel that the implementation of the \$0.10/MWh minimum collateral along with the new MTA are very sufficient in controlling smaller companies and not allowing them to obtain too big of a position like Green Hat. The \$0.10 min collateral is a form of a position limit type of collateral, hence, limiting the size of the portfolio for smaller participants. So no change to minimum capitalization should be necessary given the

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	recently implemented more strict FTR credit requirements.
TrailStone Energy Marketing, LLC ** and TrailStone Power, LLC	The ability to post capital during an auction lock period.
Velocity American Energy Master I, L.P.	\$ 1 MM
Vitol Inc.	Instead of establishing a minimum level of capitalization, PJM should tie participation levels to an entity's level of capitalization, creditworthiness, and access to liquid resources.
Q7. For those unable to participate directly (e.g., due to capitalization requirements) in PJM-operated financial markets, should an intermediary structure be established?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Leave that to the market to create something to fill that void.
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	To the extent that there is value in such participants' continued participation, such participation should be strictly limited such that the risk of default is not shifted to load.

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<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Cleveland Electric Illuminating Company, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, CWP Energy Inc., Delmarva Power & Light Company, East Kentucky Power Cooperative, Inc., Elmagin Power Fund LLC, Entergy Fund I LLC, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, FirstEnergy Solutions Corp., Handsome Lake Energy, LLC, Hartree Partners, LP, Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Ohio Edison Company, PATH Allegheny Transmission Company, LLC, PECO Energy Company, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Potomac Electric</p>	<p>No</p>
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Power Company, Southern Maryland Electric Cooperative, Inc., Strom Power, LLC, Tenaska Power Services Co., Toledo Edison Company, TrailStone Energy Marketing, LLC **, TrailStone Power, LLC, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	
Alphataraxia Palladium LLC, Franklin Power LLC, Red Wolf PT, LLC	It seems difficult to set-up an intermediary structure. Instead, we believe that by increasing collateral requirements, extent of activity will be better gated by more rational credit policies. If long term FTRs are collaterally expensive to hold, thinly capitalized entities will not hold them.
Appian Way Energy Partners MidAtlantic, LLC	Why does PJM need to be involved in this? The market will take care of this on its own. I.e. if a market participant is undercapitalized but can get a different PJM market participant to trade for them, why should PJM care? Maybe we don't understand the question.
Arc Private Capital Inc.	Why? Small participants are hardly a heavy burden for the market to administer. They pay their fees the same as a large participant. The cost to set up and operate a separate structure is unnecessary.
BioUrja Power, LLC	This should be left to the market. PJM does not need to get into this business.
Boston Energy Group, Inc.	I would have to see an example. I believe that raising the capital requirements high enough as to eliminate participants that are compliant and successful would hurt competition.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	Existing intermediary structures, such as the futures commission merchant ("FCM") model in the CFTC regulated markets, are likely to require significantly higher levels of capitalization than the ECP standards. We do not see a realistic or fair methodology for how to construct a "regulated" intermediated structure that somehow allows lower standards for those that are otherwise ineligible to participate directly; who would be asked to assume the risk of intermediation? However, the ECP model does allow for guarantees, which should allow those unable to participate directly without a guarantee to establish a guarantee relationship that will allow market participation.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC,	No. There are entities that provide sleeving/credit. Membership should not be exposed to anything.

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Direct Energy Services, LLC	
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	•Not sure how this would work but this looks like a slippery slope. If the applicant does not have the wherewithal to participate, they are in the wrong market. Having an intermediary structure doesn't seem to resolve the issue.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	open to consideration, we aren't sure how this will be helpful
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	No. The market will provide risk-weighted products and opportunities to market participants who cannot qualify for direct participation if the need emerges.
Elliott Bay Energy Trading, LLC	It is difficult to answer this question without further detail on what such a structure would look like. Companies can currently use intermediaries to participate in PJM's markets. How would the structure PJM is envisioning differ from the current state of the market?
Enel Trading North America, LLC, Freepoint Commodities, LLC, Lantar Energy LLC, MAG Energy Solutions, Inc., Presto Energy LP, Sanitas Power, LLC, The Highlands Energy Group, LLC, Velocity American Energy Master I, L.P.	Yes
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy	I don't think this should be a PJM function. If a private party wants to contract with another entity to allow it to participate, that entity should be liable for the transactions placed by the party unable participate. Basically, an intermediary should be a private party that has to

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Marketing Inc., and Prime Trading, LLC	disclose that information to PJM.
Forest Investment Group, LLC	Not sure.
Macquarie Energy, LLC	Should be explored further.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	Transacting through an intermediary is acceptable provided that the intermediary is assigned a collateral requirement commensurate with the intermediary's transactions in the market. PJM must have the ability to hold the intermediary accountable for any financial risk any of the intermediary's customers pose to the intermediary.
Office of the People's Counsel for the District of Columbia, The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division,	No. A secondary market for high risk entities increases the risk of default without any clear benefit to PJM's markets or ratepayers.
Old Dominion Electric Cooperative, TEC Trading, Inc.	Not supportive of an intermediary structure at stakeholder's expense – ok with a bank providing an LOC which is a self-funded structure.
Quattro Energy LP	It is not clear how such a structure would minimize the risk of default, unless the losses of the participants in the intermediary structure are socialized among themselves. It also depends on the minimum level of capitalization agreed to. In short, no entity direct or going through an intermediary entity should be able to participate if they do not have a capitalization of \$1M
Shell Energy North America (US), L.P.	No. They can occur natural and other exchanges can offer products
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Not sure this is necessary
Vitol Inc.	No. The bilateral market outside of PJM will work to accommodate this. Creditworthy participants can and do structure transactions and/or credit arrangements with entities who are unable or unwilling to participate directly in a market in order to facilitate desired commercial activity.

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Q8. Should there be formal training and certification requirements for individual traders to transact in the PJM's financial markets, akin to those applicable in most futures markets?	
Exelon	Do formal trainings or certifications exist for futures markets? Exelon's view is that there should not be a specific training process or requirement by PJM. PJM should focus on background checks. Each individual company should be required to make certain their staff is appropriately trained.
CitiGroup	This is part of FERC Order 741 requirements that we all certify to. When submitting FERC 741 data you have to attest that your traders are adequately trained.
Direct Energy	Training would not have changed the outcome of GreenHat and Tower defaults. All the training in the world wouldn't have prevented this or changed behavior. The behavior is expected to be discovered by PJM.
The Energy Trading Institute	Supported Direct Energy's positions. We didn't have a robust enough credit policy; that is the real issue.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Absolutely!
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania,	PJM Members have annual certification requirements regarding training, with which GreenHat would presumably have complied. Enhanced requirements likely will not mitigate the risk of future defaults; it's more productive to review the product itself and the credit policy.

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Wellsboro Electric Company,	
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, CWP Energy Inc., East Kentucky Power Cooperative, Inc., Enel Trading North America, LLC, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Lafayette Power LLC, MAG Energy Solutions, Inc., Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Presto Energy LP, Property Endeavors, LLC, Shell Energy North America (US), L.P., Toledo Edison Company, TrailStone Energy Marketing, LLC **, TrailStone Power, LLC Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	Yes
Alphataraxia Palladium LLC, Franklin Power LLC, Red Wolf PT, LLC,	Basic entity-level training for participation in the markets is reasonable, but not at the trader level.
Appian Way Energy Partners	This is a good idea as long as the required training is the right training. NYISO and California have a process for TCCs and CRRs, but it is

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MidAtlantic, LLC	really not necessary and somewhat of a joke. Futures market training is more geared toward compliance and the specifics of the broker/dealer relationships. PJM does not need this. FERC compliance training would be useful. PJM may want to require that companies demonstrate that they have done compliance training before approving them for financial trading. Most responsible trading companies do FERC compliance training annually for their traders. We do.
Arc Private Capital Inc.	Sure, but that won't prevent another Greenhat. PJM needs to do a better job of character assessment. Just because someone has capital and can pass a test doesn't mean they have character.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	No, there should not be a formal training and certification requirements for individual traders. We don't believe that these actually exist in most futures markets. PJM should focus on doing a thorough background investigation when members first join PJM, and then establishing an ongoing verification process. It should be up to individual firms to train and ensure compliance with their individual companies' risk policy.
BioUrja Power, LLC, Entergy Fund I LLC, Freepoint Commodities, LLC, Lantar Energy LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Old Dominion Electric Cooperative, Southern Maryland Electric Cooperative, Inc., TEC Trading, Inc., Tenaska Power Services Co.	No
Boston Energy Group, Inc.	I believe that traders who participate in the physical market should be required to have NERC certification. Financial traders receive

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	specialized training from the company they are working for. The training and certification requirements are right where they should be.
Boston Energy Trading and Marketing LLC	Rather than focus on the training and certification of traders who ultimately are the responsibility of their employers, this effort should focus on PJM's oversight of the financial markets. Recommendation E of the independent consultants report highlights the need for training and expertise at PJM to address its failure to ensure that qualified personnel were making decisions prior to, during, and after the default.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Market participants certify that the traders are appropriately trained as part of the annual certification.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	We would discourage an individual ISO from creating a trader-certification process. If deemed necessary, FERC should approve, implement and administer any such requirements on an industry-wide basis. However, PJM could develop and/or expand its training and training requirements for its various markets. Market participants trading in the futures markets generally are not subject to formal training and certification requirements, although the Exchanges do offer training and educational materials and may require certain financial criteria to be met by trading entities. In the futures markets, intermediaries (such as FCMs or commodity pool operators/commodity trading advisers ("CPO/CTAs")) and/or certain employees of such intermediaries generally are the entities subject to training/testing and certification requirements administered by regulators and/or self-regulatory organizations approved by the regulators, with such requirements generally designed to protect the assets of the intermediaries' clients. Instead, market participants that trade in the futures markets may be subject to certain objective financial criteria, e.g., the ECP and/or eligible commercial entity ("ECE") tests, and, in some cases, subject to additional criteria in order to be a member of an Exchange. However, most Exchanges do not require trading entities to be members of the Exchange in order to trade on the Exchange and, for most Exchanges, the members usually are intermediaries. For these reasons, PJM should expand its training as well as require the ECP standard for all market participants trading in the PJM financial markets.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	(There already is for some markets, e.g. demand response, generation)

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<p> Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC </p>	<p>Member companies s/b responsible for ensuring their representatives are properly trained and/or certified.</p>
<p> Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC </p>	<p>741 requirement contains attestation for this already but we need to better define the requirements</p>
<p> Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy ** </p>	<p>Our understanding is that PJM's current training requirements only speak to the process mechanics. Yes, PJM should implement substantive training on FTRs.</p>
<p>Elliott Bay Energy Trading, LLC</p>	<p>No. It is not clear what "training and certification requirements" PJM believes exist "in most futures markets". We are not aware of any such requirements.</p>
<p>Elmagin Power Fund LLC</p>	<p>The formal training and certification should be at the risk manager level.</p>
<p>Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC</p>	<p>We are not aware of any training requirements in most futures markets.</p>
<p>Forest Investment Group, LLC</p>	<p>Experience is more important than training and certification. Individual traders need at least three-year similar experience to transact in the PJM's financial markets.</p>
<p>Mattawoman Energy, LLC, Panda</p>	<p>PJM should establish certification requirements for individual traders. PJM should use the FINRA model which is used for licenses and</p>

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Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	certifications in the securities industry. One part of the certification [rocess should be a background test similar to the one PJM administers to prospective employees.
Ontario Power Generation Energy Trading, Inc.	no. other markets which offer congestion management products have not experienced such a negative situation where a company is in default and the ISO and the other market participants are left with the bill
Quattro Energy LP	Probably easier for new entrants to have a training procedure. But passing with a certification doesn't make risky/unethical trading behavior go away - in other words, the people who bankrupted in PJM FTR market and caused market-wide damage were all versed in FTR rules/regulations/operations and would've been passing any exam if existed.
Sanitas Power, LLC	Unsure.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Any formal trader licensing should be handled at the FERC level. Otherwise, PJM should implement a training program for each of the administered financial markets.
Strom Power, LLC	Future markets do not have formal training and certification requirements for individual traders to transact. Hedge funds and investment firms are required to go through formal certification when dealing with 3rd party capital.
The Highlands Energy Group, LLC	We don't believe there needs to be certification requirements because firms don't want to loose funds so they should be only allowing knowledgeable folks participate in the FTR auctions.
Velocity American Energy Master I, L.P.	Yes and also penalties assessed to individuals including banning from participation in case of violation of market rules
Vitol Inc.	It's not clear how this would address default risk management. In the recent FTR market default, GreenHat clearly understood how the FTR market worked. The market participants who raised concerns with PJM understood very well the FTR market and risk management. However, if such a requirement were enacted, it must apply to all of PJM's markets, not just FTRs. In addition, PJM staff must be required to complete a comparable certification process to ensure that they're qualified to manage markets and default risk and that they thoroughly understand bilateral markets. The report identified that it was PJM, not market participants, who didn't understand market behavior and risk management.

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4.2 Financial Product Range

Q9. Should PJM continue to offer FTR auctions?

Direct Energy	FTRs are a critical way to help reduce the costs we offer to our customers. They are absolutely critical and we are very happy with the product. Direct was a champion of long-term FTRs but there is a need to keep the modeling consistent. We are not sure if we are there with the modeling yet. We want to make sure that load is getting the appropriate return.
PJM ICC	Some additional education is warranted and may be a springboard for further conversations. We hear the comments around the value of FTR products from LSEs and Generators but from a customer perspective, perhaps it isn't as transparent. Those types of conversations will help us understand better if there need to be further tweaks to the product.
EDP Renewables	Seconded Direct Energy's statements
MMU	What is the product definition and what is it doing? Examine if it is doing what it is supposed to be doing and is it structured the right way. If not, we need to fix that.
Exelon	We would be happy to bring education and conversations forward. Our response is very consistent with Direct Energy's and we find they are very beneficial with hedging. Absent the product, we would be looking at potential price increase for customers. We believe that PJM should continue to offer a long-term product.
CAPS	Supports additional education but a review of the products is also needed, not just education. We need to understand the benefits they provide.
DTE Energy	Create limits for absolute amounts of the products offered on a long-term basis; also create position limits on any given company.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Only if future risk(defaults) is borne by FTR participants.
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial	This question should only be answered after consideration of evidence that the FTR auctions, and the FTR product itself, is delivering demonstrable benefit to physical load. The GreenHat default has laid bare that the largest FTR portfolios do not generally have an associated load portfolio nor are they directly associated with physical sources of supply. How and to what degree is are these large

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<p>Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	<p>portfolios delivering benefit to load? Are there different ways to structure the product that deliver benefits to load. To the extent that an FTR product, as currently constituted, can be shown to deliver benefit to physical load, it should be continued. To the extent that an FTR product cannot meet that threshold, it should not continue in its present form.</p>
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Aspen Generating, LLC, Bath County Energy, LLC, Bazinga, LLC, BioUrja Power, LLC, BJ Energy, LLC, C4GT LLC, Central Transmission, LLC, Cleveland Electric Illuminating Company, CWP Energy Inc., Doswell Limited Partnership, East Kentucky Power Cooperative, Inc., Elmagin Power Fund LLC, Enel Trading North America, LLC, Engelhart CTP (US) LLC, Entergy Fund I LLC, FirstEnergy Solutions Corp., Gen IV Investment Opportunities, LLC, Hartree Partners, LP, Helix Ironwood, LLC, Horizon Power and Light, LLC, Jersey Central Power & Light Company, Lantar Energy LLC, LifeEnergy, LLC, LSP University Park, LLC, Macquarie Energy, LLC, Manatee Transmission LLC, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Northern</p>	<p>Yes</p>

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<p>States Power Company, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Ohio Edison Company, Ontario Power Generation Energy Trading, Inc., PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Presto Energy LP, Quattro Energy LP, Renaissance Power, LLC, Riverside Generating, LLC, Sanitas Power, LLC, Silver Run Electric, LLC, Southern Maryland Electric Cooperative, Inc., Strom Power, LLC, Sunshaw Power Trading, LLC, Tenaska Power Services Co., Toledo Edison Company, TrailStone Energy Marketing, LLC **, TrailStone Power, LLC, Trans-Allegheny Interstate Line Company, University Park Energy, LLC, Velocity American Energy Master I, L.P., West Deptford Energy II, LLC, West Deptford Energy, LLC, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC</p>	<p>Yes. The FTR market plays an important role in the viability of a well-functioning electricity market. PJM should fix obvious shortcomings in their collateral and credit policies before exploring changes to a product that is, otherwise, functioning as intended, and that functions well as part of standard market design across the domestic energy markets..</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>Yes! FTRs are an integral part of nodal market design. It is important to stress that the problems associated with the Green Hat default did not result from any deficiency in the structure, performance or competitiveness of PJM's FTR market. Rather, they solely relate to PJM's credit policy and counterparty risk management practices regarding FTRs. The integrity of the FTR product, and open access to FTRs' availability in a non-discriminatory structure, are crucial aspects of the nodal market design on which EVERY well-functioning electricity market is based. Participating in an LMP system exposes market participants to congestion. Prices can be different at each "node" on the</p>

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	<p>grid when there is congestion, but in an LMP system, market participants no longer have physical rights to move power from point to point and avoid congestion. Under LMP, the physical rights must be converted to financial rights. PJM's white paper on FTRs got this exactly right in stating PJM has an "obligation to ensure the development and operation of market mechanisms to manage congestion." The FTR auctions play two crucially important roles. First, they represent a sophisticated way for PJM to allocate the excess congestion rents that are inherent in the LMP system by assigning ARR to LSEs. And second, the "FTR auction" is a market mechanism for allocating the transmission capability on the grid to market participants who value them most. ARR holders receive rights to transfer capability and may choose to convert these rights to FTRs to help manage financial risk in their portfolios; or they may choose to participate in the FTR market on a contingent basis; or they may purchase a different set of FTRs from their entitlement that better meets their specific risk tolerance and financial needs; or they may choose to forego trading FTRs altogether, instead relying on financial intermediaries or "standard offer service" auctions as the means to manage the financial risk of serving load. But even LSEs that choose to forego the FTR markets benefit from a well-functioning FTR market because financial intermediaries with whom they are transacting are themselves in need of a mechanism to efficiently manage their basis risk. Without the liquidity and transparency of FTRs as a market mechanism for managing congestion, retail service providers or standard offer service providers would need to incorporate larger risk premia in their offers to serve customer demand, resulting in higher prices for consumers. Allowing non-discriminatory "open access" to FTRs is a crucial aspect of FERC's competition agenda that has brought tremendous benefits to consumers. The FERC has recognized this fact in its EL16-6 order supporting the essential role of FTRs in the wholesale market competitive design. Every single market that has competition has this market design.</p>
Arc Private Capital Inc.	Ummmm...yes.....
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	<p>Yes, FTRs provide a mechanism for load serving entities like Exelon to hedge risk associated with producing power and serving load. If FTRs were not longer offered by PJM (or anyone), competitive suppliers would be faced with increased uncertainties when compared to the status quo which would translate into increased costs for customers.</p>

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Bancroft Energy LLC, Guzman Energy LLC	definitely yes
Boston Energy Group, Inc.	Without seeing an alternative product for hedging congestion, I will say yes.
Boston Energy Trading and Marketing LLC	FTR markets are essential to maintain open access and non-discrimination in electricity markets. A better question would be “How do we maintain integrity of the execution and participation in FTR markets?” This is consistent with the consultants’ report. There the ninth complication addressed market design flaws that contributed to the GreenHat situation, with the report pointing to a need for more opportunities for price information by increasing the number of long term FTR auctions.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Yes, generators rely on the FTR markets to hedge their risk.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	FTRs are an instrument to hedge congestion risks for generators and loads. FTR auctions should be continued to be offered.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	Yes. The independent report found that poorly established FTR collateral and minimum participation requirements, coupled with PJM’s hesitancy to act when the problem became apparent, as the cause of the GreenHat default. PJM membership should prioritize fixing these

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	shortcomings before exploring changes to a product that is, otherwise, functioning as intended.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	YES (provides valuable hedge albeit based on imperfect information)
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	Yes monthly auctions are needed to hedge effectively.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	Yes, annual, monthly, and long term
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	Yes, we rely on these to hedge our physical supply and load obligations.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	Yes, the FTR product is key to an LMP market. It is utilized by generator owners, load serving entities and lenders to properly hedge their forward risk. Without FTRs, costs would significantly increase for consumers.
Forest Investment Group, LLC	Absolutely YES!
Franklin Power LLC, Red Wolf PT,	Yes. Long-term FTRs are an important part of developing long term prices to inform market participants with a view of future value.

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LLC,	Additionally, we believe there are statutory considerations, both from FERC and Congress, that support continuing to offer LT FTRs.
Freepoint Commodities, LLC, The Highlands Energy Group, LL, Shell Energy North America (US), L.P.	Absolutely
Lafayette Power LLC	Yes Risk of default doesn't have anything to do with the products offered and everything to do with the policies governing the participation in those products.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	either directly or through a contractor
Office of the People's Counsel for the District of Columbia	FTRs may provide value to markets and ratepayers under certain circumstances. However, PJM and stakeholders should conduct a wholesale review of these products to determine for which products the benefits are greater than the costs, including the costs associated with default. The evaluation should include analysis comparing the proportion of activity between hedgers and speculators. PJM should not be running a market where most of the activity is speculative. Furthermore, PJM and stakeholders should use this opportunity to consider what reforms should take place in order to maximize the value of any FTR product to the markets and ratepayers. If structural changes need to be made to the FTR market to ensure maximum return for ratepayers, this is the time to do it. Finally, PJM and stakeholders should consider ways to mitigate the cost of any default to those not directly participating in the FTR market and ratepayers. While every effort should be made to minimize the likelihood of a default, inevitably they will occur and PJM and stakeholders should put in place protections to ensure that those least responsible for a default are not expected to cover losses arising from one.
Old Dominion Electric Cooperative, TEC Trading, Inc.	Yes, it is important for entities to be able to manage their forward, locational-basis risk. The PJM FTR markets are the only liquid means for managing the risk at a nodal level.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	It should not be PJM or it's stakeholders to pose this question. "FTRs were designed to serve as the financial equivalent of firm transmission service and play a key role in ensuring open access to firm transmission service by providing a congestion hedging function. The purpose of FTRs to serve as a congestion hedge has been well established." (Federal Energy Regulatory Commission, 2017, p. 11) https://sites.hks.harvard.edu/fs/whogan/Hogan_Nodal_Trader_102618.pdf https://sites.hks.harvard.edu/fs/whogan/Hogan_UTC_071612.pdf
Rockland Electric Company	FTRs can be a valuable tool for physical hedgers. We would like to see PJM hire someone to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. The evaluation should include analysis comparing the proportion of activity between hedgers and speculators. PJM should not be running a market where most of the

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	activity is speculative.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Of course. As detailed in the independent report, the Greenhat default was due to lax and poorly administered credit requirements, not the underlying FTR product.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	<p>Not unless sufficient value for customers can be demonstrated. There are many questions about the value of these products to customers and whether there is an approach that can improve the value. We need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. We would like a “yes” or “no” to this question from PJM as soon as possible. If the answer is “yes” then we would also like PJM to set out the timeframes for the completion of such a study.</p> <p>At this point, we are not in position to provide an opinion on this question.</p> <p>The evaluation should include analysis comparing the proportion of activity between hedgers and speculators. PJM should not be running a market where most of the activity is speculative.</p>
Vitol Inc.	Yes. The report was clear that the problems leading to the default were not with the FTR auction design or the FTR product. The very first paragraph in the foreword of the report states, “PJM’s Financial Transmission Rights (FTR) auction market differs in some ways from other financial energy markets and exchanges. However, the differences are not so great that the exchange model cannot be relied upon to improve collateral policies and operations of PJM’s FTR market.” FTR auctions are a critical producer of liquidity and price transparency at a granular level for the congestion management market. PJM’s auctions maximize the forward value of congestion for the benefit of transmission customers and enable the reconfiguration of FTRs. No other mechanism or market platform does this.
Q10. Should PJM continue to offer long-term FTRs auctions?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Same as above
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau	This question should only be answered after consideration of evidence that the long-term FTR auctions, and the long-term FTR product itself, is delivering demonstrable benefit to physical load. The GreenHat default has laid bare that the largest FTR portfolios do not

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<p>Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	<p>generally have an associated load portfolio nor are they directly associated with physical sources of supply. How and to what degree is are these large portfolios delivering benefit to load? Are there different ways to structure the product that deliver benefits to load. To the extent that a long-term FTR product, as currently constituted, can be shown to deliver benefit to physical load, it should be continued. To the extent that a long-term FTR product cannot meet that threshold, it should not continue in its present form.</p>
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	<p>No. Not necessary.</p>
<p>Alphataraxia Palladium LLC</p>	<p>Yes. Long-term FTRs are an important part of developing long term prices to inform market participants with a view of future value. Additionally, we believe there are statutory considerations, both from FERC and Congress, that support continuing to offer LT FTRs.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>Yes! Long-term auctions provide liquidity and transparency regarding basis risk that helps make the forward markets for congestion more competitive. When standard offer load auctions occur (i.e. BGS, etc.), the basis built in to the competitive market outcome depends on the risk premia the various competitors include for taking on the obligation to serve load financially. The FTR auctions provide a market</p>

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	<p>mechanism for valuing congestion that helps buyers of standard offer obligations price more competitively, reducing costs to consumers. Likewise, new entrants looking to build in specific locations often need hedges with respect to the congestion costs at their bus bar. The forward FTR auction liquidity and transparency helps the project developers get better information and allows for more competitive pricing of their projects, which can be the difference between a merchant renewable project getting built or not. Our company have been approached by solar developers for bilateral deals for the basis from their project to the local forward-traded zone or hub. We rely on the forward FTR auctions, and our ability to participant in this market for our pricing estimate. And other competitors, too, can see the FTR auction market values for congestion. This provides a disciplining effect on us and our competitors to ensure we provide the most competitive price. In this way, FTR auctions are achieving the objective stated in the PJM white paper of providing “a market mechanism for managing congestion” that provides significant competitive benefits to consumers, society and the market.</p>
<p>Arc Private Capital Inc., Bancroft Energy LLC, Guzman Energy LLC, Sunshaw Power Trading, LLC,</p>	<p>No</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	<p>Yes, PJM should continue to offer long-term FTRs auctions consistent with FERC Order 681 which required transmission organizations that are public utilities with organized electricity markets to make available long-term firm transmission rights.</p>
<p>Aspen Generating, LLC, Bath County Energy, LLC, , Bazinga, LLC, BioUrja Power, LLC, BJ Energy, LLC, Brandon Shores LLC, Brunner Island, LLC, C4GT LLC, Camden Plant Holding, L.L.C., Central Transmission, LLC, CWP Energy Inc., Doswell Limited</p>	<p>Yes</p>

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Partnership, Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC, East Kentucky Power Cooperative, Inc., Elmagin Power Fund LLC, Elmwood Park Power, LLC, Engelhart CTP (US) LLC, Entegrid Fund I LLC, Gen IV Investment Opportunities, LLC, H.A. Wagner LLC, Hartree Partners, LP, Helix Ironwood, LLC, Horizon Power and Light, LLC, Lantar Energy LLC, LifeEnergy, LLC, LMBE Project Company LLC, LSP University Park, LLC, Macquarie Energy, LLC, Manatee Transmission LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Northstar Capital Management Inc.**, Northstar NY Ltd.**, Northstar SW Ltd.**, Northstar Trading Ltd., Ontario Power Generation Energy Trading, Inc., Pedricktown Cogeneration Company LP, Renaissance Power, LLC, Riverside Generating, LLC, Sanitas Power, LLC, Shell Energy North America (US), L.P., Silver Run Electric, LLC, Southern Maryland Electric Cooperative, Inc., Strom Power, LLC, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC,

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<p>Tenaska Power Services Co., TrailStone Energy Marketing, LLC **, TrailStone Power, LLC, University Park Energy, LLC, West Deptford Energy II, LLC, West Deptford Energy, LLC, York Generation Company, LLC,</p>	
<p>Boston Energy Group, Inc.</p>	<p>I think the participants as a whole would be better protected if PJM switched to more short term markets. However, this could have an adverse effect on Load auctions if BGS auction participants are not able to effectively hedge long term congestion risk.</p>
<p>Boston Energy Trading and Marketing LLC</p>	<p>PJM states “One way to reduce the overall size of the risk pool, and thus any potential default, would be to reduce the range of product that can be traded, in terms of both tenor and locational basis.” While this may seem an appealing cure-all, it is a misguided capitulation. Reducing liquidity would not have prevented nor limited the GreenHat default, rather it increases risk and decreases the ability to manage that risk. The independent consultants did not recommend a reduction in PJM products, and to reorient this effort away from its primary goal – i.e., learning from the GreenHat situation and avoiding a third iteration of PJM’s failure to properly administer and police credit requirements – would be a mistake.</p>
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	<p>Long-term FTRs auctions should continue to be offered they provide a price resource and liquidity.</p>
<p>DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Property Endeavors, LLC, Red Wolf PT, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,</p>	<p>Yes. Long-term FTRs provide PJM membership with price transparency that allows them to hedge their risks and make long-term business decisions that ultimately lower the cost for consumers. The independent report recommends increasing the frequency of these auctions so that price transparency and risk management can be enhanced.</p>
<p>Direct Energy Business Marketing,</p>	<p>NO. (impossible to get any kind of meaningful modeling for long term auctions and it takes money away from ARRr because capability is</p>

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LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	reduced for shorter FTR auctions)
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	No. Exposes market to more risks without significant benefits and has an adverse impact on revenue adequacy and ARR availability to load. Load already is incurring higher congestion costs due to balancing congestion & M2M costs.
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	Yes, we rely on these to hedge our physical supply and load obligations. In particular, the long-term FTRs provide a beneficial opportunity to construct hedges to match the same time period as forward capacity market obligations.
Elliott Bay Energy Trading, LLC	Yes. Long-term FTR auctions bring significant value to the participants who make use of them. With amendments to PJM's rules and the hiring of qualified risk management staff long-term FTR risk can be adequately managed.
Enel Trading North America, LLC	Not sure
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	Yes, this was required by FERC and the Energy Policy Act of 2005. Without a long-term auction, anyone who wants to hedge their risk further out has to pay a significant premium.
Forest Investment Group, LLC	Absolutely NO!
Freepoint Commodities, LLC	absolutely.
Lafayette Power LLC	Yes Again, risk of default was due to a participant taking advantage of a deficiency in the collateral policy, not any specific product per se.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B	either directly or through a contractor

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Development, LLC.	
Office of the People's Counsel for the District of Columbia	Prior to making this determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products.
Old Dominion Electric Cooperative, TEC Trading, Inc.	Yes, but to the extent that the long-term auctions credit additional credit risk, collateral obligations should be appropriately sized.
Presto Energy LP	Yes, maybe with limited size. Long term market is needed for forward prices. Having a size-controlled forward market is better than none.
Quattro Energy LP	Yes and no. I think it'll benefit the overall hedging and price-disclosure process. But one or two year might be long enough, 3-year is not needed as the network topology will change a lot in that time frame.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Yes. The long-term FTR markets are important for price transparency and long-term planning.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	<p>Prior to making this determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. We would like a "yes" or "no" to this question from PJM as soon as possible. If the answer is "yes" then we would also like PJM to set out the timeframes for the completion of such a study.</p> <p>At this point, we are not in position to provide an opinion on this question, however, we do recognize that there have been a number of questions raised about this product in particular.</p>
The Highlands Energy Group, LLC	Absolutely. In fact adding more frequency would be helpful. More importantly though, since FTR options provide much less Financial Risk, FTR options should be available in the long-term FTR auctions.
Velocity American Energy Master I, L.P.	Not beyond one year
Vitol Inc.	Yes. The report was clear that the problems leading to the default were not with the FTR auction design (outside of the infrequency of auctions) or the FTR product. The very first paragraph in the foreword of the report states, "PJM's Financial Transmission Rights (FTR) auction market differs in some ways from other financial energy markets and exchanges. However, the differences are not so great that the exchange model cannot be relied upon to improve collateral policies and operations of PJM's FTR market." Long-term FTR auctions are critical in providing liquidity and price transparency at a granular level for the congestion management market for the three forward planning years beyond the current planning year. There is no other mechanism or market platform that does this. PJM should not reduce

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	the number of planning years offered. Long-term FTRs are needed instruments for pricing and hedging forward congestion risk for generation owners, generation developers, load-serving entities and traders.
Q11. Should FTR options continue to be offered?	
Exelon	We believe that options are a less risky product and should be continued to be offered. We don't believe that these were an issue with respect to GreenHat.
The Energy Trading Institute	Options should be continued to be offered. There is a more limited risk.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	same as above
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	This question should only be answered after consideration of evidence that the FTR options product is delivering demonstrable benefit to physical load. The mere fact that the product is less risky does not mean it should continue to be offered.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy	No. Not necessary.

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<p>Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC, Aspen Generating, LLC, Bath County Energy, LLC, Bazinga, LLC, C4GT LLC, Central Transmission, LLC, CWP Energy Inc., Doswell Limited Partnership, Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC, East Kentucky Power Cooperative, Inc., Elmagin Power Fund LLC, Engelhart CTP (US) LLC, Entegrid Fund I LLC, Franklin Power LLC, Gen IV Investment Opportunities, LLC, Helix Ironwood, LLC, Horizon Power and Light, LLC, Lantar Energy LLC, LifeEnergy, LLC, LSP University Park, LLC, Macquarie Energy, LLC,</p>	<p>Yes</p>

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<p>Manatee Transmission LLC, Mattawoman Energy, LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd, Ontario Power Generation Energy Trading, Inc., Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC, Red Wolf PT, LLC, Renaissance Power, LLC, Riverside Generating, LLC, Sanitas Power, LLC, Silver Run Electric, LLC, Southern Maryland Electric Cooperative, Inc., Strom Power, LLC, Sunshaw Power Trading, LLC, Tenaska Power Services Co., TrailStone Energy Marketing, LLC **, TrailStone Power, LLC, University Park Energy, LLC, Velocity American Energy Master I, L.P., West Deptford Energy II, LLC, West Deptford Energy, LLC,</p>	
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>FTR Options are less risky because they are “options.” As such, there is zero risk of congestion reversal. They are useful for market participants. However, Options can be less than ideal when taken to delivery as the FTR option pricing in the auction does not match the pricing of the option in the spot market. If the source to sink price is negative the option will not pay out in delivery, even though there may be some constraints that are binding where the FTR option would have a positive value (and would be priced in the auction). We are considering expanding our use of the FTR option product, but we do not use the product extensively at present. We would encourage PJM to continue to offer FTR options. However, this is a lower priority than having PJM continue to offer all generator locations and forward years.</p>
<p>Arc Private Capital Inc.</p>	<p>Maybe</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison</p>	<p>Yes, options are less risky products and were not a key contributor in the GreenHat default.</p>

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Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	
Bancroft Energy LLC, Guzman Energy LLC, Shell Energy North America (US), L.P.	No
BJ Energy, LLC	Yes, but please lower down the per bid-hour charge. Five times of the obligation FTR per bid-hour fee is too high; two times instead may be more reasonable.
Boston Energy Group, Inc.	Yes. I don't think that limited the products is the way to go.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Yes, FTR options are only available on a limited number of paths and generators rely on options to mitigate their risks.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC,	Options should be continued to be offered.

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PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	To the extent that there are tradeoffs for auction performance with respect to competing priorities, such as having more frequent auctions or higher bid offer limits, then we would support the elimination of FTR options. Otherwise, we see no rationale for their elimination.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	Yes, provided the rules are fair. If FTR options are maintained, PJM should not determine option premium, should be valued by market participants. Market participants can outsmart PJM on the volume leaving the loss to be covered by load.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	No preference either way at this point.
Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy Power Marketing, LLC, and Vistra Energy **	Yes, we rely on these to hedge our physical supply and load obligations. There are certain circumstances where FTR options provide us and our customers much more hedging value than FTR obligations.
Elliott Bay Energy Trading, LLC	Yes. Options make up a small part of the FTR market, are lower risk than FTR obligations, and are a valuable product for the participants who use them. It is not clear how eliminating FTR options would reduce risk in the FTR market. Furthermore, GreenHat did not own any FTR options. The elimination of options appears to be inconsistent with any historically realized or theoretical risk concern.
Enel Trading North America, LLC	Not sure
Energy Trading Institute** (a coalition	Yes, options are a good way for a market participant to lock-in their downside risk by paying a premium for their hedge transaction.

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of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	Limiting options increases risk for market participants and is counter to the goal of this task force.
Forest Investment Group, LLC	Absolutely NO!
Freepoint Commodities, LLC	absolutely.
Hartree Partners, LP	Don't use them. Don't care
Lafayette Power LLC	Yes Some market participants use them to offset risk.
Office of the People's Counsel for the District of Columbia	Prior to making this determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products.
Old Dominion Electric Cooperative, TEC Trading, Inc.	No. Create additional complex risks making credit requirement in this market overly complex.
Presto Energy LP	Yes. FTR options are great tools to control risk in FTR markets, as it can take care of the situation something never happened before happens.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	The better question should be "why should FTR options not be offered?". Has PJM provided any analysis on the benefit or harm of FTR options?
Quattro Energy LP	Yes. It serves the purpose of hedging in many occasions, posing least risk for the market/PJM when the price premium is right.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Yes. The products provide a unique hedging opportunity that has no ready substitute.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Prior to making this determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. We would like a "yes" or "no" to this question from PJM as soon as possible. If the answer is "yes" then we would also like PJM to set out the timeframes for the completion of such a study. At this point, we are not in position to provide an opinion on this question.

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The Highlands Energy Group, LLC	Absolutely!!! We feel this question is absurd. This is a "Financial Risk Management" task force, so why would we ask whether or not we should remove FTR options since they are a much better "Financial Risk Management" tool than the FTR obligations. In fact, we should be asking how many more option paths should we make available so that the use of options could increase and provide stronger financial risk management to all PJM Members.
Vitol Inc.	Yes, FTR options should remain as a product offering. If PJM is concerned that FTR options are hampering auction software efficiency, prior to considering eliminating the option product, PJM should first eliminate all overlapping periods (eliminate quarters and keep months) and products (eliminate the 24 hour FTR product and keep the peak and off-peak products) to improve software performance efficiency.
Q12. Should all current locations be available for financial trading? If not, which locations should trading be limited to?	
Exelon	PJM should continue to allow all current locations to be available for financial trading.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Fewer more liquid points makes more sense
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	The presumption should not be that all current locations be available for financial trading. Only those locations that are shown to deliver benefit to customers should be available for trading.

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<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	<p>There are many locations (biddable nodes) in today's market that lend it to speculative activity. Locations should be more akin to physical transactions.</p>
<p>Alphataraxia Palladium LLC</p>	<p>Yes, all current locations should remain available for financial trading. As a guiding principle, locations with appropriate metering (such that real prices, not algorithmically-generated prices, can be determined) should be priced. All locations with a price in the day-ahead market are biddable in PJM's FTR auctions and they should remain so. The independent report and the GreenHat default provide no basis for the reduction in biddable locations.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>Locations traded in the long term and annual auctions – trading of all generation, load zones, aggregates and hubs – are crucial to a functioning FTR market. We would like PJM to keep the additional monthly auction nodes, but this is less crucial than continuing to offer the annual auction set in the monthly auctions. We believe it would be extremely useful for PJM to allow trading at future generation nodes as soon as practical and ideally by the time a project goes into construction. This will allow for better future hedging opportunities for new entrants. PJM has a good process for retiring nodes for FTR trading when a unit retires. Granular bidding on FTR nodes is very important to allow FTR market prices to better reflect expected future congestion patterns. Gen to gen bidding is more efficient for isolating specific congestion exposures. Moreover, many market participants are often looking to purchase a portfolio of congestion exposures, rather than specific gen to load paths, in order to manage congestion risks and exposures. For instance, investors in an IPP may not be looking to invest in specific exposures to individual power plants, but rather want to have a long exposure to the “PJM market” in general. If that IPP has assets in a location that tends to be constrained away from summer price spikes, the IPP owner may want its FTR traders to purchase a set of FTRs that will tend to spike in hot summer weather. In this way, the IPP can build a portfolio that better reflects the expectations of its investors. This point can be generalized for the strategies on many different types of FTR market</p>

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	<p>participants. Market participants may choose to purchase a specific portfolio of constraints that more explicitly match their company's strategy and risk management requirements. They can optimize value for their shareholders (allowing them to bid more competitively to serve consumers) by targeting specific congestion that they deem to be undervalued, or that represents a particular risk for their asset group, while avoiding other congestion that they do not want exposure to or which is too expensive in the auction. Whether a market participant is predominantly load, a power producer or a marketer, or some combination of the three, each market participant will have its own unique exposure to congestion risk. These market participants may want to purchase a set of transmission congestion rights that match the specific nature of their own congestion risks. And they will be better able to manage these risks by purchasing generator-to-generator transmission congestion rights so that they achieve an overall exposure to congestion in their transmission congestion rights portfolio that matches their individual company needs. Providing the flexibility for market participants to manage their risk in the way that best suits their risk profile, including by offering diverse transmission congestion right paths in the auction, will increase competition, liquidity and lead to a more efficient market.</p>
<p>Arc Private Capital Inc., Aspen Generating, LLC, Bancroft Energy LLC, Bath County Energy, LLC, , Bazinga, LLC, BioUrja Power, LLC, BJ Energy, LLC, C4GT LLC, Central Transmission, LLC, CWP Energy Inc., Doswell Limited Partnership, Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC, East Kentucky Power Cooperative, Inc., Elmagin Power Fund LLC, Entergrid Fund I LLC, Gen IV Investment Opportunities, LLC, Guzman Energy LLC, Hartree Partners, LP, Helix Ironwood, LLC, Horizon Power and Light, LLC, Lantar Energy LLC, LifeEnergy, LLC, LSP University Park, LLC, Macquarie Energy, LLC, Manatee Transmission LLC, Mattawoman Energy, LLC,</p>	<p>Yes</p>

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<p>Northern States Power Company, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC, Renaissance Power, LLC, Riverside Generating, LLC, Sanitas Power, LLC, Shell Energy North America (US), L.P., Silver Run Electric, LLC, Southern Maryland Electric Cooperative, Inc., Strom Power, LLC, Sunshaw Power Trading, LLC, Tenaska Power Services Co., University Park Energy, LLC, Velocity American Energy Master I, L.P., West Deptford Energy II, LLC, West Deptford Energy, LLC</p>	
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	<p>Yes, PJM should continue to allow all current locations to be available for financial trading.</p>

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Boston Energy Group, Inc.	I think that the market benefits from granular trading. I don't like the recent trend of PJM attempting to manipulate price by only allowing trading at a small set of nodes where they can control price to achieve their desired outcome. However, if a location does not accurately reflect the market, it should not be available.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Yes, all current locations should be available for trading. Limiting the locations may reduce market liquidity and reduce a generator's ability to hedge their risks.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	PSEG believes status quo is appropriate.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	Yes, all current locations should remain available for financial trading. In general, all locations with a price in the day-ahead market are biddable in PJM's FTR auctions and they should remain so. The independent report and the GreenHat default provide no basis for the reduction in biddable locations.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	Yes, provided the rules are fair

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<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>If no demonstrable benefits of trading on non-physical nodes, trading should be limited to physical nodes.</p>
<p>Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy Power Marketing, LLC, and Vistra Energy **</p>	<p>Yes. We routinely hedge gen nodes to hubs, load zones to hubs, and gen nodes to load zones. We also find hedging value in FTRs from gen nodes to gen nodes.</p>
<p>Enel Trading North America, LLC</p>	<p>Yes all current locations should be available</p>
<p>Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC</p>	<p>Yes, this was not an FTR market design problem, it was a credit problem. The number of available paths has not created any issues for PJM in the past. Further, limiting the paths limits liquidity, increases prices, and decreases a market participants ability to have a well hedged portfolio.</p>
<p>Engelhart CTP (US) LLC</p>	<p>All should be available.</p>
<p>Forest Investment Group, LLC</p>	<p>Absolutely YES!</p>
<p>Franklin Power LLC, Red Wolf PT, LLC,</p>	<p>Yes, all current locations should remain available for financial trading. As a guiding principle, locations with appropriate metering (such that real prices, not algorithmically-generated prices, can be determined) should be priced. All locations with a price in the day-ahead market are biddable in PJM's FTR auctions and they should remain so. The independent report and the GreenHat default provide no basis for the reduction in biddable locations.</p>
<p>Freepoint Commodities, LLC</p>	<p>All locations should be available.</p>
<p>Lafayette Power LLC</p>	<p>Yes Already, Long Term and Annual FTR auctions have a reduced set of nodes.</p>
<p>Office of the People's Counsel for the District of Columbia</p>	<p>As part of making this kind of determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products.</p>

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Old Dominion Electric Cooperative, TEC Trading, Inc.	Hubs, zones and gen buses are appropriate
Ontario Power Generation Energy Trading, Inc.	No
Presto Energy LP	Yes. Currently prompt month FTR allows for all locations, which is very good. In many cases, there are many nearby congestion paths, and more trading location can allow for detailed analysis of these congestion paths, and thus better price discovery and market efficiency. It is market participants' job to analyze and express views on which congestion path has more value. As a market operator, PJM should not limit it. To further facilitate it, PJM can allow more trading location in nearby forward non-prompt auctions, such as FW-1 and FW-2 monthly auctions.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	The eligible set of nodes should be expanded, not contracted, to any node that has a Day-Ahead LMP (~12,000). The current list of nodes is not suitable, which is roughly 1,900 for Annual and Non-Prompt Auctions, and roughly 5,500 for Prompt Monthly Auctions. In 2000, the current CEO of PJM wrote a paper on the importance of nodal trading in the PJM Market: https://www.yumpu.com/en/document/read/22320300/can-flowgates-really-work-an-analysis-of-transmission- PJM has long espoused the view that more granular pricing in its energy markets leads to better price formation and more efficient market outcomes. In 2000, PJM published an analysis of transmission congestion in the PJM market to demonstrate that the nodal pricing model was more efficient and sustainable than alternative zonal or flowgate models. The analysis showed that the alternative flowgate model would result in large, unpredictable uplift payments that would inhibit trading and “destroy liquidity in the market.” PJM stated that such large uplift payments would create perverse incentives to market participants because market participants may not have incentives to alleviate congestion in highly congested areas that are not addressed by flowgates, and vice versa. In contrast, in the more granular nodal model, only market participants that actually deliver energy to congested areas pay increased charges, creating incentives for market participants to alleviate congestion through market pricing, rather than allocating uplift. PJM highlights three products that help participants manage congestion and in turn create efficiencies by managing congestion at different stages of the market. Further, PJM explains that the Locational Marginal Pricing (“LMP”) model with overlying aggregate hubs and zones for forward trading, is more adaptable to changing flow patterns because nodal market prices and, in turn, hubs and zones, will change as flow patterns change. Accordingly, financial transmission rights will also change in value as flow patterns change, limiting the need for the RTO to intervene and revise available financial transmission rights and reducing costs associated with managing congestion. As PJM put it, in the more granular LMP-based market, “the market will decide which rights are valuable given the current system conditions ... [which] supports efficient grid operations. The conclusion of the paper states, “... market prices provide the incentive for participants to efficiently deal with transmission congestion. In the PJM Market, traders have the opportunity to acquire protection form the congestion charges on a forward basis a variety of financial contracts.” https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14751564
Quattro Energy LP	Yes. All locations should be offered given the purpose of hedging and price convergence. A subsets of nodes can be tradable financially while the whole system is being modeled, would create distortion of pricing where the trading activities creates artificial system constraints

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	that should not exist in physical flow given the economics of supply and demand. Given the volume of FTR is getting higher in various locations year over year, the trend supports more locations being available for trading, both FTR and virtual (hedging for FTR).
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Yes, all current locations should remain available for financial trading. The independent report and the GreenHat default provide no basis for the reduction in biddable nodes.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Prior to making this kind of determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. We would like a “yes” or “no” to this question from PJM as soon as possible. If the answer is “yes” then we would also like PJM to set out the timeframes for the completion of such a study. At this point, we are not in position to provide an opinion on this question.
The Highlands Energy Group, LLC	Yes, the available nodes is just right for providing the appropriate ability to manage nodal risk.
Vitol Inc.	Yes, all current locations should remain available in order to maximize competition for congestion hedging, maximize the value of the transmission system in FTR auctions, allow for FTR portfolio diversification, enable effective hedging against constraints, and provide a forward price curve at granular levels.
Q13. Should individual nodes require bona fide physical activity in order to be traded?	
Exelon	Does not think individual nodes should be used and expressed there are concerned with liquidity.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Probably yes, what is the argument otherwise?
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark	Unless there is a showing that individual nodes without physical activity provide concrete benefits to physical customers, they should not be eligible for financial trading. The value/risk equation is unlikely to balance in this case.

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<p>Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Southern Maryland Electric Cooperative, Inc., Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	<p>Yes</p>
<p>Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC,</p>	<p>No. In general, all locations with a price in the day-ahead market should be biddable in FTR auctions. Each FTR market participant should be eligible to bid at each biddable location to promote competition and price discovery.</p>

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<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>As noted above in Q12, it would be useful to have future generation included in the models sooner and allowing for the trading of generation to generation FTRs is extremely important. Some additional examples may help. Many generators face a unique challenge when dealing with power output. A combined cycle generator may face congestion risk relative to the load aggregate point when running at full output. However, when the plant is not running, the very act of being off line can shift congestion to the plant. In this example, not only would the generation owner lose revenue by not generating power, but their FTR obligation would also become a potential significant unhedged risk which can be quite costly. In this case the generator may want to buy the congestion that is correlated with its basis risk through a gen to gen FTR, but avoid buying FTRs that source from their power plant. Now consider the example of renewable generation to demonstrate the importance of open access to point to point service. Wind and solar often create unique congestion challenges. When a certain geographic area of the grid is particularly conducive to wind or solar, many similar plants may be built electrically close to each other. When it is particularly sunny or windy, these plants will generate high output, which will contribute to transmission constraints. But if it is cloudy or not windy, it is possible congestion could reverse or shift against certain units. Again, the solution would be to use a set of gen to gen FTRs to purchase a portfolio of congestion exposures that better hedge the wind plant output when it is very windy, but avoiding the downside if it is not windy. Having greater granularity of paths allows the generation owner to acquire a portfolio of FTRs that better match its individual trading strategy and financial exposure, again resulting in a more efficient market design that allows the owner to bid more competitively to potential buyers.</p>
<p>Arc Private Capital Inc.</p>	<p>No. The elimination of financial participation will only lead to gamesmanship of a different type by asset owners and load serving entities. The consumer will lose at the end of that day. The NYSE does not limit participation in AAPL stock to only people who own iPhones. That's ridiculous.</p>
<p>Aspen Generating, LLC, Bancroft Energy LLC, Bath County Energy, LLC, Bazinga, LLC, BioUrja Power, LLC, BJ Energy, LLC, Boston Energy Group, Inc., C4GT LLC, Central Transmission, LLC, CWP Energy Inc., Doswell Limited Partnership, Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC, East Kentucky Power Cooperative, Inc., Elmagin Power</p>	<p>No</p>

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<p>Fund LLC, Enel Trading North America, LLC, Engelhart CTP (US) LLC , Entergy Fund I LLC, Gen IV Investment Opportunities, LLC, Freepoint Commodities, LLC, Guzman Energy LLC, Hartree Partners, LP, Horizon Power and Light, LLC, Helix Ironwood, LLC, Lafayette Power LLC, Lantar Energy LLC, LifeEnergy, LLC, LSP University Park, LLC, Macquarie Energy, LLC, Manatee Transmission LLC, Mattawoman Energy, LLC, Northern States Power Company, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Ontario Power Generation Energy Trading, Inc., Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC, Renaissance Power, LLC, Riverside Generating, LLC, Sanitas Power, LLC, Shell Energy North America (US), L.P., Silver Run Electric, LLC, Strom Power, LLC, Sunshaw Power Trading, LLC, Tenaska Power Services Co., University Park Energy, LLC, Velocity American Energy Master I, L.P., West Deptford Energy II, LLC, West Deptford Energy, LLC,</p>	
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power</p>	<p>No, we are concerned with the impacts to liquidity if such a rule change were to be adopted.</p>

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<p>Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	
<p>Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC</p>	<p>Restricting the nodes will be too limiting to a generators' ability to hedge.</p>
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	<p>PSEG believes status quo is appropriate.</p>
<p>Direct Energy Business Marketing, LLC, Direct Energy Business, LLC,</p>	<p>Not sure what bona fide physical activity would look like given that the entire day-ahead market is financial in nature. We don't think "bona</p>

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Direct Energy Services, LLC	fide phys activity” should be a requirement.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	See above.
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	No. However, if PJM intends to contract FTR product offerings in some way, it should still maintain the ability of participants hedging physical supply and actual load obligations to do so.
Elliott Bay Energy Trading, LLC	No. The focus on "bona fide physical activity" appears to represent a misunderstanding of how PJM's nodal markets work. While most load settles at zonal prices, those prices are composed of the prices of individual load nodes within the zone. It is therefore critical that PJM has the best possible pricing at all nodes on the system. Allowing bidding at the largest possible set of nodes will result in the most efficient market outcomes. This is especially true in FTR auctions where a single snapshot of the transmission system and zonal load weights must be used to price periods up to one full year.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	No, this would be going back to the idea of a contract path and is counter open access, the need for liquidity and competition and increases risk, counter to the goals of this task force.
Forest Investment Group, LLC	Absolutely NO!
Franklin Power LLC, Red Wolf PT, LLC,	No. In general, all locations with a price in the day-ahead market should be biddable in FTR auctions. Each FTR market participant should be eligible to bid at each biddable location to promote competition and price discovery.
Office of the People's Counsel for the District of Columbia	As part of making this kind of determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products.
Old Dominion Electric Cooperative, TEC Trading, Inc.	No. Just limit to hubs, zones and gen buses.

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Presto Energy LP	No. It may sound like a good idea, but other ISOs experience showed that nodal limit causes more troubles, such as false price separation in the FTR auction due to nodal limit.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	<p>If an electron flows through a node, there is physical activity, and it should be eligible in FTR auctions. Congestion does not exist only from a generator to a zone, or a hub to hub. Congestion exists on individual lines between any two points on the network. Removing the ability to hedge congestion on such paths is nonsensical. There is no evidence as to why reducing the eligible nodes is beneficial to the market. Any PJM member can participate in the FTR Market. This includes generation companies, load-serving entities, electric distribution companies, end-use customers, and financial entities that do not provide nor take delivery of any physical power. FTR's are forward positions that can be used both to hedge a company's physical position, or merely just to profit from the differences in congestion in the day-ahead market. A FTR position is only profitable if a participant bids and acquires a transmission path in which the total congestion revenue collected from the day-ahead market is greater than the cost paid to acquire the position. FTR participants are forecasting and bidding on transmission paths where future congestion is expected in the day-ahead market. Very thorough analysis and knowledge is required to accurately predict where this congestion will occur. The goal of any organization is to maximize profit, and therefore participants will try to acquire paths in the FTR Markets that will yield the greatest gains. All of PJM cleared monthly FTR positions (transmission paths) are publicly available on the PJM FTR website. Examining these positions can be used to understand where FTR participants are valuing future day-ahead congestion on the transmission network. Because market participants are driven to higher profitability, it can be assumed that transmission paths with higher volumes indicate a higher perceived value of congestion on those paths. XO Energy analyzed all of the cleared FTR positions in the PJM prompt-month markets during the 2016/2017 Planning Year. Each transmission path that cleared in the market was categorized into the type of node used as a source and sink on the pair; Aggregate, EHV, Generator, Hub, Interface, Load Bus, Residual Metered EDC, and Load Zone. The statistics below provide information on where the market is valuing the forward congestion in the day-ahead markets: Generator -> Generator 32% Load Bus -> Load Bus 31% Generator -> Load Bus 8% Load Bus -> Generator 7% Generator -> Aggregate 3% Aggregate -> Generator 3% Hub -> Load Zone 1% Generator -> Load Zone 1% Generator -> Hub 1% Load Bus -> Aggregate 1% Load Zone -> Load Zone 1% https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14751564</p>
Quattro Energy LP	No. Node existed for locational pricing - trading activities can support and help with price discovery and correction when things are misaligned or mispriced.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	No. For the sake of price discovery and transparency, all day-ahead nodes need to be available in FTR markets.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	As part of making this kind of determination, we need documented, independent evidence to show these products provide sufficient value for customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. We would like a "yes" or "no" to this question from PJM as soon as possible. If the answer is "yes" then we would also like PJM to set out the timeframes for the completion of such a study.

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	At this point, we are not in position to provide an opinion on this question.
The Highlands Energy Group, LLC	No, again, the available trading nodes are providing the appropriate ability to manage nodal risk. As mentioned above, we should be offering FTR options on more nodes to allow more hedging opportunity.
Vitol Inc.	No. Assuming that bona fide physical activity refers to settlement activity, there should not be a requirement for physical activity at a node in order to trade at that node. Physical flows occur at the nodal level. Hedging against the impact of a constraint may be best achieved at nodes where no physical activity (i.e. settlement activity) occurs. A robust FTR market allows market participants to compete for hedges against the impact of constraints. We shouldn't limit this activity by limiting available locations to only those with physical activity.
4.3 FTR Auction Execution	
Q14. What is an appropriate auction frequency for different FTR tenors and expiries?	
Vitol	It is appropriate to go to a Monthly auction for the FTR products and we need to look at the structure a little differently. We think that we should break the market up to distinct monthly time steps and offer up products on a monthly basis. It really makes the product and transaction capabilities align with how markets outside of PJM are structured. It helps resolve the default risk management issue outlined in the report.
Direct Energy	At this point, Direct is not where Vitol is and is not clear on the benefits of the long-term monthly auction. We believe there are revenues that are being taken out of the market that are not going back to our customers. We want to understand the impacts to what customers get at the end of the day. We remain concerned with modeling errors regardless of auction frequency.
The Energy Trading Institute	Now when market participants notice a modeling error they need to wait until the base case modeling; it may provide more opportunity to track. Agreed that we all need some additional understanding. We also need to focus on technologies. ERCOT will release a monthly model and Nexant runs the market for ERCOT. We need to get additional insight into this.
DC Energy	There needs to be additional transparency around the market to give individuals an opportunity to identify modeling errors.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower	Seems like it is worth a try.

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Energy Marketing, LLC	
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	The appropriate auction frequency should be guided by the results of the necessary analysis with respect to the nature of the FTR product itself.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	Monthly FTR auctions are appropriate to allow retail providers to hedge retail obligations subject to change monthly. Annual ARR allocation is appropriate and should not change. LTFTRs are not necessary.
Alphataraxia Palladium LLC	The current structure is appropriate. The current long-term auctions are only twice-a-year, it seems like having quarterly (four times a

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	year) auctions for the purposes of determining current credit and collateral requirements, would be safer.
Appian Way Energy Partners MidAtlantic, LLC	The annual and bal-yr reconfiguration auctions are ideal as they are. For long-term auctions, there is a large gap between December and June for market pricing on the YR2 and YR3 FTRs from the long term auction. We believe it would be appropriate to add one extra LT auction for YR2 and YR3 FTRs only in February of each year. This would ensure LT FTR pricing approximately every quarter. Even better, but this would require more effort, would be to run 5 bi-monthly auctions from June – February for the Long-Term auction.
Arc Private Capital Inc.	Weekly auctions occurring closer to the time period in question eliminates "gambling" behavior and makes the product more oriented towards a view on outages and weather.
Aspen Generating, LLC, Bath County Energy, LLC, Central Transmission, LLC, Doswell Limited Partnership, Gen IV Investment Opportunities, LLC, Helix Ironwood, LLC, LifeEnergy, LLC, LSP University Park, LLC, Renaissance Power, LLC, Riverside Generating, LLC, Silver Run Electric, LLC, University Park Energy, LLC, West Deptford Energy II, LLC, West Deptford Energy, LLC,	Agree with Board report on increasing frequency of Long-Term FTRs
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric	Exelon is largely supportive of the current auction frequency. Exelon would be supportive of adding one additional round of the Long Term FTR auction in between December and June.

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Power Company,	
BioUrja Power, LLC	Once per quarter seems adequate
BJ Energy, LLC	The current frequencies for planning year auction, annual auction, and Long-term are just right!
Boston Energy Group, Inc.	I think FTRs would benefit from seasonal auctions as well as shorter term markets.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Monthly or bi-monthly auctions will provide better liquidity and a good opportunity to identify and correct any modeling errors. FTR tenors should be expanded from just a full-year product to allow for the trading of selected months or seasons. Requiring only a full year strip as a tradable product increases credit exposure.
C4GT LLC, Entergy Fund I LLC,	Monthly
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	PSEG believes status quo is appropriate.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	The current structure is appropriate with the exception of adding one (or perhaps two) more rounds for long-term FTRs. Specifically, a round or two could be added between the December and June rounds.

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Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	Quarterly. . ARR allocation should remain ATC, FTR should remain peak and off peak products regardless of tenor decided upon We believe this will better line up accurate modeling with allocation of the system as well as restrict long term exposure to potential credit defaults. We continue to believe that long term FTRs diminish potential revenue to ARR customers because by definition system capability must be withheld or will not be accurately represented because of the inability to forecast outages that far in the future.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	Recommend long-term auction to be discontinued. If continued, maintain current frequency.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	More frequent auctions could cause a liquidity concern which could negatively impact the accuracy of the Mark-to-Auction marks applied based on the auction results.
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	We agree that having more frequent auctions for the long term products would be helpful. We would suggest moving from the current three times per year to six times per year.
East Kentucky Power Cooperative, Inc.	Monthly auctions. It is good to get opinions of FTR traders from - small, medium and large companies including munis, cooperatives, IOU's. Making it a more liquid market with margin requirements like a futures market would be ideal. An initial margin should be required of all players.
Elliott Bay Energy Trading, LLC	Monthly or bi-monthly long-term auctions would be appropriate.
Elmagin Power Fund LLC	No opinion, though I agree that for price discovery including long-term FTRs in monthly or bi-monthly auctions would be good for all parties involved.

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Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	Ideally, a 48 month rolling auction would be implemented. If that goal is immediately unattainable, we should lay out a plan to achieve that goal over the next 2-3 years, taking incremental steps to get there.
Engelhart CTP (US) LLC	Ref Report Recommendation F2
Forest Investment Group, LLC	Using monthly auction to MTM long-term FTRs is sufficient.
Franklin Power LLC, Red Wolf PT, LLC,	The current structure is appropriate. The current long-term auctions are only twice-a-year, it seems like having quarterly (four times a year) auctions for the purposes of determining current credit and collateral requirements, would be safer.
Freepoint Commodities, LLC	annual auctions 2 or 3 times a year.
Hartree Partners, LP	LT auctions should be run more often for price discovery
Lafayette Power LLC	The current structure is appropriate.
Lantar Energy LLC	Long term auctions remain 3 times a year
Macquarie Energy, LLC	Equal or greater than today's frequency.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	quarterly for annual; monthly for everything else
Northstar Capital Management Inc.**; Northstar NY Ltd. **, Northstar SW Ltd. **, and Northstar Trading Ltd.	monthly or at a minimum bi-monthly
Office of the People's Counsel for the District of Columbia	PJM should provide an independent evaluation regarding the increase or decrease of risk and cost associated with more frequent auctions.
Old Dominion Electric Cooperative,	Current structure is good.

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TEC Trading, Inc.	
Ontario Power Generation Energy Trading, Inc.	once a month balance of period auctions. this allows for traders to offer back ftrs they bought in any one quarterly or from the annual auctions. similar to NYISO BoP TCC Auction market design
Presto Energy LP	PJM can allow for more monthly auction too. Currently annual auctions have 4 rounds, which is very good. PJM can allow for more monthly auction, say 2 rounds per month.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	The more granular and more frequent the better. System conditions change rapidly, and providing granular auction periods allows participants to quickly hedge positions with these changes. Daily, Weekly, Monthly, Seasonal, Annual, and Long-Term would be appropriate. PJM's argument to do such is that it is too complex because the software can not handle it. In the meantime, PJM brags about hardware and software upgrades and then extends the Day-Ahead deadline to 11am. Yet, they hide behind the "complexity of software" in solving the FTR Market.
Quattro Energy LP	ERCOT is a good model where more than one monthly auctions are allowed and any tenors for forward months are allowed any any auction, on ALL available locations. But if more tenors and frequencies increase the complexity of clearing algorithm, it's more reasonable to maintain the nodes available for the right coverage of the footprints instead of increasing different tenors.
Rockland Electric Company	PJM should be running auctions regularly on a monthly basis, otherwise price/value discovery is not adequate to mark positions.
Sanitas Power, LLC	Unsure
Shell Energy North America (US), L.P.	As often as possible so at least bi-monthly. This will not completely cure or address mark-to -market issues but will help assuming there is sufficient liquidity. Some type of system to mark large inter-auction moves should be considered.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Adding an additional long-term round in the spring would create an adequate auction structure.
Southern Maryland Electric Cooperative, Inc.	Status quo
Strom Power, LLC	The current model works well.
Tenaska Power Services Co.	Semi-Annual for years 2+3 (like ERCOT's rolling 6 months). All auctions should have monthly granularity.
The Delaware Division of the Public	Prior to making this kind of determination, we need documented, independent evidence to show these products provide sufficient value for

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<p>Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division</p>	<p>customers. We would like to see PJM hire an independent expert to evaluate the consumer benefits of all the FTR products. We would expect that a recommendation to this question would be included in that report. We would like a “yes” or “no” to this question from PJM as soon as possible. If the answer is “yes” then we would also like PJM to set out the timeframes for the completion of such a study.</p> <p>At this point, we are not in position to provide an opinion on this question, However, we are not inclined to support more frequent (or additional) auctions at this point.</p> <p>PJM should be running auctions regularly on a monthly basis, otherwise price/value discovery is not adequate to mark positions.</p> <p>PJM should hire someone to provide stakeholder information on the increase or decrease of risk and cost associated with more frequent auctions.</p>
<p>The Highlands Energy Group, LLC</p>	<p>We believe bi-monthly would be sufficient.</p>
<p>Velocity American Energy Master I, L.P.</p>	<p>Current frequency is good for a planning year.</p>
<p>Vitol Inc.</p>	<p>PJM should conduct auctions each month for all delivery months in the current planning year and the next three planning years. This will give greater price transparency within a smaller time step to capture changes in congestion values due to changes to the transmission system. Furthermore, PJM should change the product offering to eliminate annual and quarterly products and auction off each month in the current planning year and the next three planning years as separate and distinct products. The combined effects of these changes will provide benefits, such as allowing for greater precision and expedience in forward price transparency, enabling more effective default risk management, allowing for a more tailored FTR portfolio development in line with individual company needs, and if needed, a more orderly liquidation process.</p>
<p>4.4 Structural</p>	
<p>Q15. Should PJM outsource the credit risk management of FTRs, and potentially other financial products, to an external clearing house. i.e., a CFTC-regulated, Derivatives Clearing Organization (DCO)?</p>	
<p>Nodal Exchange</p>	<p>Proposal to support the clearing of FTRs through nodal exchange and have many insights into how this would work. We also have some good transparency from the regulators and separating CFTC and FERC jurisdiction. We have been meeting with individuals and doing education surrounding the proposal. It would not only be available to PJM but to other RTOs as well. One of the ISOs we are working with is ISONE and expects to be moving forward with a clearing service in 2020. Happy to meet with anyone who wants to find out more.</p>
<p>AES Energy Storage, LLC, AES ES</p>	<p>Yes. Why is PJM qualified to continue to manage these markets? Why is PJM managing these markets critical to PJM's mission?</p>

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<p>Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC</p>	
<p>Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	<p>It's too early in the process to know the answer to this question. As a threshold matter, FTRs must still be shown to provide tangible benefit to physical load. To the extent that such work is "outsourced," the costs of such outsourcing should be borne by FTR participants and potentially other financial products as well as the costs of any such defaults be born solely by such market participants.</p>
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Mattawoman Energy, LLC, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company,</p>	<p>Yes</p>

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Potomac Edison Company d/b/a Allegheny Power, PPGI Fund A/B Development, LLC, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	
Alphataraxia Palladium LLC	No. However, PJM should develop a separate ISO unit for financial products, which would focus on credit risk/market management, infrastructure and tools, initiatives, inefficiencies, and defaults related to the financial product markets. An effective credit group drawing lessons from the policies of other ISOs could help promote appropriate collateral and credit requirements, and ensure that PJM's credit requirements continue to be appropriately scaled to tenor and size.
Appian Way Energy Partners MidAtlantic, LLC	No, we do not think outsourcing of credit risk management to a DCO is a workable solution, though it is worthy of consideration. Overall, we believe that the DCO clearing members do not have the same understanding of the FTR product or the importance of the FTR market structure and are not necessarily committed to the same principles of promoting open access and competition. We are skeptical that this idea can work, and at a minimum believe there is way more wood to chop before PJM could adopt this approach. In particular, we do not think DCO clearing members will want the FTR business or want to clear all the current FTR market participants. As it will not be possible to solve these challenges by the December 2019 time frame, we would recommend PJM defer pursuing this path.
Arc Private Capital Inc.	Maybe? To who?
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	Exelon is open to exploring options for outsourcing the credit risk management function for FTRs and/or third party clearing of the FTR market.

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BioUrja Power, LLC	Maybe
BJ Energy, LLC	No, not necessary.
Boston Energy Group, Inc.	I think this could be something to explore.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	PJM needs to address the issue on both a short- and the long-term basis. Outsourcing the credit risk management of FTRs is a lengthy / long-term undertaking. In the near-term, should this option be pursued, PJM will continue to run FTR auctions in the short-term and would need to address the credit issues in the short-term to bridge the gap. PJM should bring on the appropriate expertise to manage credit risk in the short-term, this would negate the need to outsource in the long-term. Outsourcing will create a liquidity drain on market participants.
C4GT LLC, Elmagin Power Fund LLC, Enel Trading North America, LLC, Entegrid Fund I LLC, Lafayette Power LLC, Lantar Energy LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Shell Energy North America (US), L.P., Southern Maryland Electric Cooperative, Inc., Strom Power, LLC, Sunshaw Power Trading, LLC, Tenaska Power Services Co., Velocity American Energy Master I, L.P.	No
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC,	We support clearing FTRs through a clearing organization. The costs, structure and benefits should be reviewed during the task force.

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PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	
CWP Energy Inc.	If deemed so by PJM due to internal constraints (
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	No. However, PJM should develop a separate ISO unit for financial products, which would focus on credit risk/market management, infrastructure and tools, initiatives, inefficiencies, and defaults related to the financial product markets. Such responsibilities and focus would be better housed within PJM, but with such unit reporting directly to the PJM board on market issues. CFTC-regulated entities, like DCOs, are not designed for markets structured like PJM as DCOs and Exchanges generally interact with intermediaries and not directly with market participants. As noted above, the intermediary layer would add unnecessary complexity and costs. Alternatively, effective credit management, appropriate collateral/credit requirements scaled to tenor and size, along with ongoing surveillance of credit requirements by PJM, in particular administered by a separate PJM credit and market unit focused on financial products, would be much more effective and efficient.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	Theoretically trust independent agency to administer FTRs within tariff rules better than PJM, however would depend on cost.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	open to consideration
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra	No, assuming that PJM makes appropriate changes to mitigate the exposure risk.

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Energy **	
East Kentucky Power Cooperative, Inc.	Might be a good idea.
Elliott Bay Energy Trading, LLC	No. It is not clear that this would reduce risk in any meaningful way, but it would add significant administrative complexity and regulatory overhead. If the goal of outsourcing is to shift the risk of a default to certain parties then this shift could likely be accomplished within the PJM market construct.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	I think it depends on the details. Would everyone have to or be able to do this? What does the fee look like? This needs more discussion and vetting. But I do think putting out an RFP to gauge interest would be helpful.
Forest Investment Group, LLC	Absolutely NO!
Franklin Power LLC, Red Wolf PT, LLC,	No. However, PJM should develop a separate ISO unit for financial products, which would focus on credit risk/market management, infrastructure and tools, initiatives, inefficiencies, and defaults related to the financial product markets. An effective credit group drawing lessons from the policies of other ISOs could help promote appropriate collateral and credit requirements, and ensure that PJM's credit requirements continue to be appropriately scaled to tenor and size.
Freepoint Commodities, LLC	yes, PJM has proven it cannot manage systemic risk in FTRs correctly.
Hartree Partners, LP	Or adopt similar practices in house
Macquarie Energy, LLC	Yes. Should be explored further
Northern States Power Company	No they should fix their controls
Office of the People's Counsel for the District of Columbia	It is not clear that PJM has the institutional knowledge to expertly manage credit risk. The learning curve may be too steep to make up the gap. At this preliminary stage of the discussion, we are inclined to support outsourcing the credit risk management of FTRs. PJM should at least consider a partial outsourcing, whereby a clearing organization handles credit risk management activities for several years while allowing PJM personnel to "shadow" and develop the necessary expertise. However, the costs and risks of outsourcing must be borne by the participants and not on the backs of load. We need more education on the options and the risks.
Old Dominion Electric Cooperative,	No. PJM should be able to handle this basic risk-management "blocking and tackling" on its own.

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TEC Trading, Inc.	
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	No, it should not. PJM should have a capable staff to develop a comprehensive and logical credit policy. Outside counsel should be involved in developing such policies, but ultimately, PJM should be the one to administer such risk management.
Quattro Energy LP	If the outsourcing help to maintain the allowed type of financial products and available tenor/size, then it's a good idea to outsource.
Rockland Electric Company	At this preliminary stage of the discussion, we are inclined to support outsourcing the credit risk management of FTRs. We certainly need more education on the options and the risks. It is not clear that PJM has the institutional knowledge to expertly manage credit risk. The learning curve may be too steep to make up the gap. PJM should at least consider a partial outsourcing, whereby a clearing organization handles credit risk management activities for several years while allowing PJM personnel to "shadow" and develop the necessary expertise.
Sanitas Power, LLC	Unsure
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	No. PJM should hire and develop in-house resources to better handle the credit and risk management of FTRs.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	At this preliminary stage of the discussion, we are inclined to support outsourcing the credit risk management of FTRs. However, the costs and risks must be borne by the participants and not on the backs of load. We certainly need more education on the options and the risks. It is not clear that PJM has the institutional knowledge to expertly manage credit risk. The learning curve may be too steep to make up the gap. [Adding to the answer above] PJM should at least consider a partial outsourcing, whereby a clearing organization handles credit risk management activities for several years while allowing PJM personnel to "shadow" and develop the necessary expertise.
The Highlands Energy Group, LLC	We don't have a strong option on this question.
Vitol Inc.	Yes, PJM should strongly consider doing this. Exchanges, for example, have deep, specialized knowledge and experience with managing default risk and facilitating secondary market transactions. In addition, commercial entities are very comfortable with how exchanges manage default risk and prefer this type of security in order to significantly limit exposure to a default.

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Q16. If external clearing is utilized, should it be mandatory or voluntary?

Nodal Exchange

The Nodal Exchange proposal is a voluntary proposal by necessity because that is the structure which keeps the FERC and CFTC separate. Mandatory would require the CFTC to have jurisdiction over the FTR market/auctions. CFTC would take over jurisdiction once it moves to the clearing house. Participation should be risk-based. PJM could use Nodal's model for margin requirement.

AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, AES Ohio Generation, LLC, Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Boston Energy Group, Inc., C4GT LLC, Cleveland Electric Illuminating Company, Dayton Power & Light Company (The), East Kentucky Power Cooperative, Inc., Entergy Fund I LLC, FirstEnergy Solutions Corp., Freepoint Commodities, LLC, Jersey Central Power & Light Company, Macquarie Energy, LLC, Mattawoman Energy, LLC, Metropolitan Edison Company, Miami Valley Lighting, LLC, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Ohio Edison Company, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a

Mandatory

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<p>Allegheny Power, PPGI Fund A/B Development, LLC, Shell Energy North America (US), L.P., sPower Energy Marketing, LLC, Toledo Edison Company, TrailStone Energy Marketing, LLC **, TrailStone Power, LLC Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	<p>It's too early in the process to know the answer to this question. However, in either case, the costs of such external clearing should be borne by the participants and the costs of any such defaults similarly be born solely by the participants.</p>
<p>Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,</p>	<p>Voluntary. To-date, there are no demonstrated benefits of mandatory clearing for the PJM products, but instead increased costs for both market participants and PJM.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>DCOs and/or their clearing members simply may not accept as counterparties many of the participants who currently trade FTRs.</p>
<p>Arc Private Capital Inc.</p>	<p>How would a voluntary clearing look? Does that exist anywhere else? Sounds inequitable.</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant,</p>	<p>It is our understanding that current CFTC rules prevent external clearing from being mandatory.</p>

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<p>LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	
<p>BJ Energy, LLC</p>	<p>It should be voluntary.</p>
<p>Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC</p>	<p>See Q15.</p>
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar</p>	<p>If clearing is utilized then it should be mandatory for all FTRs.</p>

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LLC	
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC	External clearing would require fully backstopped funding which we would likely oppose, unless FTRs are completely isolated
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	Mandatory. How would voluntary work?
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	Voluntary, similar to other financial trading that can be cleared by the exchange or transacted over the counter bilaterally.
Elliott Bay Energy Trading, LLC	Voluntary. Obtaining access to clearing houses such as Nodal is a non-trivial process and would likely serve as a significant barrier to participation for many current FTR market participants. Given concerns about FTR market liquidity it would be undesirable to implement changes that would be expected to materially impact participation and liquidity.
Enel Trading North America, LLC, Lafayette Power LLC, Lantar Energy LLC, Ontario Power Generation Energy Trading, Inc., Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC, Strom Power, LLC, Sunshaw Power Trading, LLC, Velocity American Energy Master I, L.P.	Voluntary
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy	Again, we would have to look at the CFTC rules. I don't think you can mandate it.

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Marketing Inc., and Prime Trading, LLC	
Forest Investment Group, LLC	Absolutely NO external clearing!
Hartree Partners, LP	everyone should use whatever is decided
Office of the People's Counsel for the District of Columbia	We need more education on the options, risks, and requirements.
Quattro Energy LP	If it is selected it should be mandatory for all participants, otherwise, it loses its effect. Whether such outsourcing is needed or not remains another question.
Sanitas Power, LLC	Unsure
Tenaska Power Services Co.	Voluntary. If this is mandatory, could lead to unintended or unexpected consequences.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	At this preliminary stage of the discussion, we are inclined to support mandatory – to the extent possible. We certainly need more education on the options, risks, and requirements. Mandatory versus voluntary would not be a deal breaker.
The Highlands Energy Group, LLC	We don't have a strong option on this question.
Vitol Inc.	Likely this will have to be voluntary but with the condition that those entities who choose to remain under PJM's credit policy umbrella will bear the default risk of this group of entities, since others who utilize the third-party clearinghouse will have done so to significantly minimize their exposure to default risk.
Q17. If not outsourced, should financial markets form a separate risk pool to other trading activity? i.e., with defaults socialized only amongst the participants in those markets, rather than amongst the membership as a whole.	
AEP	<i>Is it possible to limit the default to participants in those markets?</i>
DC Energy	<i>Isolating FTR product default to that product; conversation needs to be a little more in depth if we are going to change the procedure – not</i>

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	just the default but how the product and market are structured.
PJM ICC	Interested in exploring if defaults in the FTR space should be fenced and be discussed further; retail customers are questioning why they should be serving as a back stop for speculative activity.
The Energy Trading Institute	Agree this shouldn't happen in a vacuum. We pointed this out and yet we are sharing a portion of this as well and share the frustration. This needs to be done in a manner so that it is not unduly discriminatory.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, AES Ohio Generation, LLC, Miami Valley Lighting, LLC, Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, CWP Energy Inc., Dayton Power & Light Company (The), East Kentucky Power Cooperative, Inc., FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Mattawoman Energy, LLC, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, Old Dominion Electric Cooperative, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, PPGI Fund A/B Development, LLC., sPower Energy Marketing, LLC, TEC Trading, Inc. Toledo Edison Company, Trans-	Yes

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Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	The threshold question of ensuring that the FTR product in its various forms delivers tangible benefit to load must be answered in the affirmative before answering this question. To the extent that the answer to the threshold question is yes, financial markets should form a separate risk pool, with the costs and risks borne only amongst the participants in those markets. Load should not serve as a backstop or guarantor of such financial market activity.
Alphataraxia Palladium LLC	As long as there is an appropriate credit policy, the risk pools shouldn't matter. Extensive focus on risk pools takes for granted that large defaults WILL happen. Experience with other markets has shown that reasonable and constantly-refreshed collateral requirements prevent sizeable defaults. Insofar as all participants benefit from the prices in all parts of the market, it would seem inappropriate to silo risk from one product (say, long term FTRs) to only participants in that one product. Again, so long as credit policies are reasonable and often-reviewed, this shouldn't be an issue. Finally, narrow default allocation pools increase the odds of a cascading failure, which would further undermine the integrity of the market-place.
Appian Way Energy Partners MidAtlantic, LLC	This idea has merit, but if FTR participants are assigned default risk, they should be insulated from exposure to non-FTR market defaults.
Arc Private Capital Inc.	That's ridiculous, unless you're going to remove financial participants responsibility for paying the socialized operating reserves. If gen and load are solely responsible for op res, and good risk management practices are in place, sure. But financial participants in virtuals shouldn't be paying socialized defaults from FTRs in addition to socialized op res from gen/load when the financial transactions technically never deviate from expectations.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison	Exelon is open to discussing alternative ways to allocate default risk.

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Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	
Boston Energy Group, Inc.	No. The defaults should always be socialized amongst all participants. If you allow defaults to be socialized within a subset of participants, you will run into the problem of participants wanting a say in the risk management of other participants,
Boston Energy Trading and Marketing LLC	Financial markets should not form a risk pool separate from other trading activity. As the markets are not independent, this would produce perverse incentives to shift risk from product to product.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Socialization should continue amongst the membership as a whole.
C4GT LLC, BioUrja Power, LLC, BJ Energy, LLC, Entegrid Fund I LLC, Freepoint Commodities, LLC, Lantar Energy LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Southern Maryland	No

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<p>Electric Cooperative, Inc., Sunshaw Power Trading, LLC, Tenaska Power Services Co., TrailStone Energy Marketing, LLC **, TrailStone Power, LLC</p>	
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	<p>PSEG does not support trying to isolate pieces of the market into different sections for defaults.</p>
<p>DC Energy Mid-Atlantic, LLC, DC Energy, LLC</p>	<p>The answer is more complex than a simple yes or no. There could be separate risk pools, but this would require other changes and considerations. For example, in order for the such separations to be just, reasonable and not unduly discriminatory, those bearing the default risk for the financial markets risk pool would need to also have primary stakeholder voting rights over the financial market's structure, collateral and risk management rules which define the default exposure.</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>Reducing the pool of participants to socialize losses to could escalate the problem by causing cascading defaults.</p>
<p>Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra</p>	<p>No. If properly secured, FTR markets should not create undue risk to market participants.</p>

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Energy **	
Elliott Bay Energy Trading, LLC	This is a reasonable issue to discuss. However, it would need to be discussed in the context of all of PJM's markets. For example, the capacity market is a long term forward market with significant default risk. It is not clear why a capacity market default should be borne by all PJM members but a FTR market default should be borne by only FTR market participants.
Elmagin Power Fund LLC	No - members that do not directly participate benefit from the financial markets as a whole
Enel Trading North America, LLC	Maybe
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	I am fine with ring fencing risk, as long as everyone is ring fenced to the markets they are participating in. For example, a market participant not participating in the capacity market would not be liable for a default there.
Forest Investment Group, LLC	The PJM physical markets and financial markets are interrelated. The benefits and market downsides should be shared amongst the membership as a whole.
Franklin Power LLC, Red Wolf PT, LLC,	As long as there is an appropriate credit policy, the risk pools shouldn't matter. Extensive focus on risk pools takes for granted that large defaults WILL happen. Experience with other markets has shown that reasonable and constantly-refreshed collateral requirements prevent sizeable defaults. Insofar as all participants benefit from the prices in all parts of the market, it would seem inappropriate to silo risk from one product (say, long term FTRs) to only participants in that one product. Again, so long as credit policies are reasonable and often-reviewed, this shouldn't be an issue. Finally, narrow default allocation pools increase the odds of a cascading failure, which would further undermine the integrity of the market-place.
Hartree Partners, LP	no - then it is left to each participant to then keep a watch on every other participant in the market which is a burden. this should be a pjw job
Macquarie Energy, LLC	Disagree to the extent that Markets are intertwined.
Northern States Power Company	If PJM doesn't fix the issue they should be liable
Office of the People's Counsel for the District of Columbia, The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia	We would like this option to be outlined and at least considered.

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Consumer Advocate Division	
Ontario Power Generation Energy Trading, Inc.	that would be a fair way where if an FTR participant defaults then the losses are shared among ftr market participants
Presto Energy LP	There should be a balance between risk and award. If FTR default is allocated among FTR participants, some rules need to be changed. For example, previous FTR excess is allocated to FTR participants at the end of planning year, but it is allocated to ARR holders now. It should be changed back to allocating FTR excess to FTR participants, if FTR default is allocated only to FTR participants.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	If financial markets are a separate risk pool, then only financial marketers should be allowed to establish policies to their markets. This question is very much related to question 24 of this survey (Q24. Is it appropriate to establish explicit skillset requirements for stakeholder process participation?) It would be unfair to separate such markets and still have stakeholders meddling in the involvement of markets in which they have no interest in.
Quattro Energy LP	A separate pool for financial players makes sense, if that can help maintain the availability of tenors, availability of the tradable products, and better and more efficient collateralization process.
Sanitas Power, LLC	Unsure
Shell Energy North America (US), L.P.	With better risk management and tighter credit and controls it should not be necessary to create a separate risk pool.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	No. Unless PJM intends to make a wholesale change to the financial markets where the participants in the FTR market have more control over the structure of the market and collateral requirements and other financial and physical products are treated similarly.
Strom Power, LLC	No. All sectors benefit from the FTRs market, should they participate in it or not.
The Highlands Energy Group, LLC	We don't believe this change is necessary.
Velocity American Energy Master I, L.P.	No. The products and markets are all interlinked. It would not make sense to form a separate risk pool.
Vitol Inc.	We would be willing to discuss this, but it would have to come with conditions, including but not limited to, this type of arrangement would apply to all PJM products/markets and the entities bearing the risk in each market would be the only ones allowed to vote on the credit and risk management rules for the respective markets.

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4.5 Credit Risk Assessment, Collateralization and Risk Limits	
Q18. Is two (2) days the right amount, or should it be less?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	2 days with triggers for shorter calls
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	The answer to this question should be informed by the analysis of the FTR products' benefit to load and any necessary re-tooling as well as by the PJM's new CRO.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny	Should be one (1) business day.

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Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	
Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,	If PJM is referring to collateral calls, yes, 2 days sufficient.
Appian Way Energy Partners MidAtlantic, LLC	Ask FCMs what their process is -- this is a technical question they will have already solved.
Atlantic City Electric Company, Baltimore Gas and Electric Company, C4GT LLC, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company, Property Endeavors, LLC, Shell Energy North America (US), L.P., Southern Maryland Electric Cooperative, Inc., XO Energy MA,	Yes

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L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	
BJ Energy, LLC, Sunshaw Power Trading, LLC	Two days is the right amount.
Boston Energy Group, Inc., Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **, Freeport Commodities, LLC,	Two days is fine.
Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	Two days is appropriate.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	PSEG believes 2 days is the correct amount.

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<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>•Yes, it should be less. Under our cleared transactions, VM has to be met same day. Under our bilateral transactions, it's usually 24 hours.</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>Yes. 2 days is the right amount. Shortening would not materially decrease risk and would be potentially disruptive to business processes, especially if collateral calls are not made at the start of the business day.</p>
<p>East Kentucky Power Cooperative, Inc.</p>	<p>2 days would be the right amount.</p>
<p>Elmagin Power Fund LLC</p>	<p>Yes. 2 days seems fair.</p>
<p>Enel Trading North America, LLC</p>	<p>Shouldn't be less</p>
<p>Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC</p>	<p>Two days is fairly standard.</p>
<p>Entergrid Fund I LLC, Strom Power, LLC</p>	<p>Right amount</p>
<p>Forest Investment Group, LLC</p>	<p>Two days is the right amount. Could be more. Absolutely NO less!100%</p>
<p>Hartree Partners, LP</p>	<p>2 days</p>
<p>Lantar Energy LLC</p>	<p>two days are right</p>

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Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	next business day
Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd.	Right amount of time.
Office of the People's Counsel for the District of Columbia	We need more education on the options and the risks.
Old Dominion Electric Cooperative, TEC Trading, Inc.	We do NYMEX in one day and think that is reasonable.
Ontario Power Generation Energy Trading, Inc.	1 day
Quattro Energy LP	Probably right
Sanitas Power, LLC	Unsure
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	2 days for collateral calls is the right amount.
Tenaska Power Services Co., Velocity American Energy Master I, L.P.	Two days is right
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec)Exemptions should be considered for reputable hedgers with demonstrated needs Concentration Limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market liquidity.

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The Highlands Energy Group, LLC	We don't have a strong option on this question.
TrailStone Energy Marketing, LLC **, TrailStone Power, LLC	No
Vitol Inc.	Two business days is reasonable.
Q19. Under what circumstances should PJM have authority to exercise similar discretion?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Begs the question of why should PJM be in this role in the first place.
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	The answer to this question should be informed by PJM's new CRO as well as the circumstances under which exchanges have authority to exercise discretion.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy	TBD - item should be discussed further by FRMSTF.

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<p>Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC, Franklin Power LLC, Red Wolf PT, LLC,</p>	<p>If PJM is granted emergency powers, those emergency situations need to be carefully and limitedly defined. A carte blanche seems inappropriate for a well-functioning / predictable market structure.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>PJM needs to be able to address a situation change such that a market participant looks to be exposed to losses that are not covered by its posted collateral. If this occurs, PJM should be able to impose a multiplier on the initial margin to address the risk. One way this could occur is if a participants' FTR portfolio starts to experience losses on a new congestion pattern. PJM's risk management group should then assess their forward exposure to the constraint, and potential for realized losses in the near term. A rationale for the additional collateral call is that the next auctions have not occurred to create a market value on the new congestion, so PJM would be asking for additional margin to protect against the expected mark-to-market move in the subsequent auctions.</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC,</p>	<p>PJM should have the authority to exercise discretion to deal with unanticipated market emergency events above a defined impact threshold.</p>

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Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,	
Boston Energy Trading and Marketing LLC	While we do not object to giving PJM discretion that other futures markets have to deal with unanticipated market emergency events, PJM should not have authority to exercise discretion without increased transparency or opportunity for stakeholder input on the nature of the discretion to be exercised.
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	PJM should have discretion to request higher collateral requirements if they feel a participants market activity risk is higher than the collateral posted.
DC Energy Mid-Atlantic, LLC, DC Energy, LLC	Similar to Q18, the question is incomplete.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	•PJM should be allowed to have similar discretion, so long as it's well defined. Such scenarios are extremely rare and are more evident in equities market. Rarely occurs in commodity markets.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable	There should be some room for PJM to use its discretion in the handling of extraordinary events. For example, SPP's tariff allows it some discretion in the handling of a TCR default and does not force liquidation.

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Services, LLC	
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	There should not be a supermargining trigger. If the market is properly collateralized it will not be needed.
East Kentucky Power Cooperative, Inc.	PJM should monitor activities of participants and when there are red flags, it should exercise discretion.
Elmagin Power Fund LLC	I am uncomfortable with "discretion" as it is opaque.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	I think there should be a process set up and agreed to by stakeholders regarding PJM's discretion in these situations.
Entergrid Fund I LLC, Freepoint Commodities, LLC, Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC	None
Forest Investment Group, LLC	100%
Lantar Energy LLC	No opinion
Office of the People's Counsel for the District of Columbia	We need more education on the options and the risks.
Old Dominion Electric Cooperative, TEC Trading, Inc.	We would support discretion.
Ontario Power Generation Energy	if a company with a certain margin of actually making a margine call then PJM should have the right to exercise some discretion

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Trading, Inc.	
Sanitas Power, LLC	Unsure
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	PJM should be able to request additional collateral if mark-to-auction or spot market valuations create reasonable concerns.
Southern Maryland Electric Cooperative, Inc.	If the credit (\$.10/MWh min) and MTM changes recently implemented work (and they should), PJM's
Strom Power, LLC	In case of a heightened risk of default, PJM should engage with participate to cure identified additional risks. If risks not cured or remediated, then PJM should have authority to freeze participant before a default.
Tenaska Power Services Co.	When PJM has a reasonable reason to believe that the calculated credit requirement is materially insufficient to cover the risk associated with an FTR.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec)Exemptions should be considered for reputable hedgers with demonstrated needs Concentration Limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market liquidity.
The Highlands Energy Group, LLC	As soon as PJM becomes aware of a potential issue they should have the authority to act immediately to remedy a credit / financial risk.
Velocity American Energy Master I, L.P.	Not sure
Vitol Inc.	If this question refers to PJM's discretion to deal with unanticipated market emergency events, there should be some discretion, but we'd strongly prefer that PJM and stakeholders engage in discussions with the exchanges to establish what these events are and what actions could be taken.
Q20. What factors should determine the size of position limits?	
DC Energy	They should be metric based; based on capitalization and credit worthiness.

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AEP	Agreed with DC Energy; if we come up with a potential future exposure, it should be mirrored with the capitalization to meet the potential future exposure and then ability to meet margin call.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Rate of change of position is one to look at.
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	Position limits should be based, at least in part, on creditworthiness, capitalization, and in such a way that no market participant becomes “too big to fail.” Market power protections should also be considered.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company,	Total Net Worth (TNW) should be factor. There should be a tiered approach where positions limits are scaled with TNW.

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<p>Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,</p>	<p>Position limits are unnecessary. Instead, capitalization requirements should scale with the size of a portfolio.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>Position limits are less important than having sufficient initial margin to cover the extent of FTR trading activity. As long as the margins are sufficient, PJM should not need to be so precise regarding position limits. However, as noted above, it may be useful for PJM to limit exposure relative to the participant's net worth. PJM's risk group should model more closely the FTR portfolios of large FTR participants to test for potential undiversified congestion reversals or other potential risks.</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	<p>Exelon is open to exploring position limits as a backstop to a well-functioning and comprehensive credit policy. Limits could be potentially sized by looking at the largest FTR portfolio (excluding GreenHat) over the last three years plus a reasonable adder for growth.</p>
<p>Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company</p>	<p>PJM should scale and enforce the collateral held to cover the size of the portfolio.</p>

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<p>LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC</p>	
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	<p>Agree with DC Energy and AEP comments that positions limits should be based on capitalization and collateral to cover potential futuer exposure.</p>
<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>Limits s/b metric based; based on capitalization and credit worthiness. Should also include tenor and potential exposure</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>Positions limits could be determined by the minimum positions associated with a members credit rating and/or capitalization. The limits should tighten as the positions lengthen.</p>

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Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	PJM should not implement an administratively determined MW-level position limit. Position limits should instead focus on risk.
East Kentucky Power Cooperative, Inc.	Size of position should be relative. If it is a hedging activity, then ensure it is not 110% over their natural position. If it is a spec position, evaluate the size relative to total size of market at that node. If it represents 25% then it may represent a large position.
Elliott Bay Energy Trading, LLC	Given that PJM members have decided that all defaulted FTR portfolios should be held to settlement it is not clear what would be accomplished by instituting position limits. There is no longer a risk that the liquidation of defaulted portfolio would cause auction prices to diverge from expected congestion values due to liquidity issues. Appropriately designed position based collateral requirements should thus make position limits unnecessary. Furthermore, the development of reasonable positions limits is a difficult task. The CFTC has been trying to develop position limits for various markets since Dodd-Frank was enacted in 2010.
Elmagin Power Fund LLC	I do not believe position limits should exist.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	Balance sheet.
Entegrid Fund I LLC	size of the collateral
Forest Investment Group, LLC	Locations, Tenors, and Volumes
Freepoint Commodities, LLC	market capitalization and a parametric VAR process
Hartree Partners, LP	Based on capitalization
Lantar Energy LLC	posted credit
Macquarie Energy, LLC	Among other requirements, posted collateral, financial strength, and experience.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty	financial strength of market participant

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LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	
Northstar Capital Management Inc.**, Northstar NY Ltd.**, Northstar SW Ltd.**, Northstar Trading Ltd.	Collateral, Capitalization, Profitability
Office of the People's Counsel for the District of Columbia	We need more education on the options and the risks.
Old Dominion Electric Cooperative, TEC Trading, Inc.	Credit risk management best practices. Requirements for hedgers and speculators might be differentiated.
Ontario Power Generation Energy Trading, Inc.	report recommendations sound appropriate and correlated to how much money the company has put up
Presto Energy LP	When limiting position size, PJM should consider past performance as well. If suddenly a market participant has abnormal size change, it may be OK to limit it. But if the past performance is OK and future position size is similar to historical average, PJM should not limit it
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	The capacity of the transmission network as well as fully collateralized companies, and a strong risk policy should be sufficient. There should be no position limits.
Quattro Energy LP	It would make more sense to work on adding collateral requirement with risk assessment of ongoing position. Only limit the future size if the participant cannot meet the additional collateral requirement based on active position risk assessment.
Rockland Electric Company	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec). Participants should not be allow position sizes that exceed their ability to meet collateral call in reasonably stressed market conditions.
Sanitas Power, LLC	Unsure
Shell Energy North America (US), L.P.	What the position is being used for, e.g. hedging and the size of the market.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual,	Position limits are not necessary if positions (and bids) are properly collateralized.

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LLC	
Strom Power, LLC	Cash or LC Collateral.
Tenaska Power Services Co.	Financial worthiness Capitalization Available financial liquidity
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec)Exemptions should be considered for reputable hedgers with demonstrated needs Concentration Limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market liquidity.
The Highlands Energy Group, LLC	We believe the recently implemented \$0.10/MWh minimum collateral requirement is already essentially applying a position limit requirement.
Velocity American Energy Master I, L.P.	Collateral posted and prior violations if any
Vitol Inc.	The most important factor in determining the size of position limits is the participant's overall credit profile and ability to provide liquid collateral to secure the positions.
Q21. What criteria should be required for exemption from position limits?	
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania,	Insignificant information provided for PJMICC to offer informed opinion. We welcome education from PJM's new CRO, its consultant and the Market Monitor.

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Wellsboro Electric Company,	
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	There should be no exemptions.
Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,	Position limits are unnecessary. Instead, capitalization requirements should scale with the size of a portfolio.
Appian Way Energy Partners MidAtlantic, LLC	As noted above, we believe position limits are secondary to ensuring sufficient initial margin.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power	If position limits are implemented, an exemption could be defined for “hedgers” similar to how its defined on the exchanges.

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<p>Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	
<p>Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC</p>	<p>PJM should scale and enforce the collateral held to cover the size of the portfolio.</p>
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	<p>PSEG recommends a benchmarking effort with other ISOs, exchanges, and FCMs to review policies and procedures to determine best practices.</p>
<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017</p>	<p>•No member s/b exempt from metrics established for position limits.</p>

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Projects LLC	
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	Bona fide hedgers should be exempt from position limits.
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	If PJM implements position limits, it should allow exemptions up to a MW quantity that is the size of the physical position to be hedged. Additionally, that exemption should be up to 105% or 110% of the physical position size to allow that the amount of actually available capacity from a unit in the winter may be higher than the summer capacity rating.
East Kentucky Power Cooperative, Inc.	Pure hedging activity such a LSE or a generator. Provided it does not exceed 110% of their natural position
Elliott Bay Energy Trading, LLC	If positions limits are established there should be no exemptions from the limits.
Elmagin Power Fund LLC	Audited Financial statements.
Entergrid Fund I LLC, Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC	none
Forest Investment Group, LLC	Trading only prompt-month FTRs
Freepoint Commodities, LLC	collateral posting / credit
Hartree Partners, LP	Based on capitilization

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Lantar Energy LLC	only when sufficient credit is posted
Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd.	Adequate collateral
Office of the People's Counsel for the District of Columbia	We need more education on the options and the risks.
Old Dominion Electric Cooperative, TEC Trading, Inc.	See 20.
Presto Energy LP	The past performance. If the past performance is good enough and the future position is not dramatically different from past position, no limit should be imposed.
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	The capacity of the transmission network as well as fully collateralized companies, and a strong risk policy should be sufficient. There should be no position limits.
Quattro Energy LP	When there is procedure to assess ongoing risk with current position and impose collateral associated with it, there won't be a need to make position limit unless the participant fail to meet additional collateral requirement (margin call).
Rockland Electric Company	Exemptions should be considered for reputable hedgers with demonstrated needs
Sanitas Power, LLC	Unsure
Shell Energy North America (US), L.P.	It would be important to exempt hedging activity but PJM would need to define this and hire expert from places that have experience in administering hedges. Also, the time that the limit is applied is important. If PJM is going down this path then it may want to hire an outside firm to administer its program.
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Position limits are not necessary if positions (and bids) are properly collateralized.
Strom Power, LLC	Cash/LC Collateral should be the main indicator to position limit. Nothing else.

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Tenaska Power Services Co.	All should be subject to position limits based on collateral.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec)Exemptions should be considered for reputable hedgers with demonstrated needs Concentration Limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market liquidity.
The Highlands Energy Group, LLC	see above
Velocity American Energy Master I, L.P.	Not sure
Vitol Inc.	The most important factor in determining the size of position limits is the participant's overall credit profile and ability to provide liquid collateral to secure the positions.
Q22. Should PJM introduce a concentration limit, and what should its threshold be?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Yes to the extent that risk is will correlated to position concentrations
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper	The concept seems prudent; however, insignificant information provided for PJMICC to offer informed opinion. We welcome education from PJM's new CRO, its consultant and the Market Monitor.

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Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	Yes. Threshold TBD - Should be discussed by FRMSTF.
Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,	No. Concentration limits are not necessary. Instead, capitalization requirements should scale with the size of a portfolio.
Appian Way Energy Partners MidAtlantic, LLC	We believe it would be difficult for PJM to measure concentration limits. However, the risk group can test the market participant's portfolio against historical patterns or potential future constraints and if it identifies a problem request a multiplier on initial margin.
Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy	No

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<p>Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company, Entergrid Fund I LLC, Freepoint Commodities, LLC, Lantar Energy LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP, Shell Energy North America (US), L.P., Velocity American Energy Master I, L.P.</p>	
<p>Boston Energy Trading and Marketing LLC</p>	<p>We do not believe that volumetric or concentration limits would have helped PJM avoid a GreenHat -type situation. Rather a “but-for” based credit requirement, which calculates an additional credit requirement as the difference between the cleared value of the participant’s contract and the value of that contract but for the participant’s bids would have. This credit requirement would be an in-auction calculated credit requirement, rather than a post auction process, like mark to auction, which would not be preventative. In other words, do not allow a market participant to dictate its collateral requirements through its market activity.</p>
<p>Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York</p>	<p>PJM should scale and enforce the collateral held to cover the size of the portfolio.</p>

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Generation Company, LLC	
Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	PSEG recommends a benchmarking effort with other ISOs, exchanges, and FCMs to review policies and procedures to determine best practices.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	•If a member continues to meet creditworthiness standards and position limit metrics, concentration should not present a problem.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	Concentrations should be monitored but not limited by explicit rule. PJM should provide members with periodic concentration reports.
Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy Power Marketing, LLC, and Vistra Energy **	If PJM does introduce a concentration limit, it should be risk-adjusted based on the entities' creditworthiness.

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East Kentucky Power Cooperative, Inc.	Yes. About 25%
Elliott Bay Energy Trading, LLC	It is unclear what PJM means by a "concentration limit". See response to Q20.
Elmagin Power Fund LLC	I do not believe concentration limits should exist.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	I think position limits and higher credit fees should capture this issue. You can do entire portfolio modeling as suggested in Mr. Bessemer's report after the Tower Default and you can capture this as well.
Forest Investment Group, LLC	Only for non-prompt and long-term FTRs. The limit could be based on tenor, location, and volume.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	future answer
Office of the People's Counsel for the District of Columbia	We need more education on the options and the risks.
Old Dominion Electric Cooperative, TEC Trading, Inc.	Yes. Credit risk management best practices.
Presto Energy LP	No, PJM should not introduce a concentration limit.
Quattro Energy LP	There should be NO concentration limit imposed - only the aggregate net position for the market as a whole has a real meaning in concentration. A market participant having a big size on one position, which is negated by another market position on the opposite position, won't be creating any need for concentration limit.
Rockland Electric Company	Concentration limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market liquidity.
Sanitas Power, LLC	Unsure

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Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	Concentration limits are not necessary if positions (and bids) are properly collateralized.
Strom Power, LLC	No. PJM should not over intervene in free markets, as it usually generates unwelcome consequences. The collateral requirements should capture all risks, including concentration limits.
Tenaska Power Services Co.	Yes. No immediate great ideas on how to measure and enforce this.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec)Exemptions should be considered for reputable hedgers with demonstrated needs Concentration Limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market liquidity.
The Highlands Energy Group, LLC	see above
Vitol Inc.	The most important factor in determining limits is the participant's overall credit profile and ability to provide liquid collateral to secure the positions.
Q23. Should full collateralization also be applied to cash markets (DAM, RTM, etc.)?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	How does that risk compare to FTR risks? Same rules for same risks should be the rule.
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial	This may warrant some consideration; however, based on experience, there is not the same track record of defaults in cash markets. The costs and benefits of full collateralization should be considered and may be found to be not necessary or, alternately, that the costs far outweigh the benefits.

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Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	TBD - item should be discussed by FRMSTF.
Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,	Yes, with collateral levels based on tenure and size of the portfolio.
Appian Way Energy Partners MidAtlantic, LLC	As part of the emergency events process described above, PJM should be monitoring Accounts Receivable from spot market activity along with FTR activity and request a multiplier on initial margin if there is a problem.
Atlantic City Electric Company, Baltimore Gas and Electric Company,	No

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<p>Brandon Shores LLC, Brunner Island, LLC, Calvert Cliffs Nuclear Power Plant, LLC, Camden Plant Holding, L.L.C., Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Elmagin Power Fund LLC, Elmwood Park Power, LLC, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Freepoint Commodities, LLC, H.A. Wagner LLC, Handsome Lake Energy, LLC, LMBE Project Company LLC, Macquarie Energy, LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark Bay Cogeneration Partnership, L.P., PECO Energy Company, Pedricktown Cogeneration Company LP, Potomac Electric Power Company, Shell Energy North America (US), L.P., Strom Power, LLC, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, Tenaska Power Services Co., Velocity American Energy Master I, L.P. York Generation Company, LLC,</p>	
<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC,</p>	<p>Full collateralization should not be applied to cash markets.</p>

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PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC	
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	•This moves closer to an exchange based structure. It will provide better protection, but at a higher cost. Level of collateralization should be based on the entity's creditworthiness and level of exposure across the system.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	o. Credit rules for cash markets do not need to be updated by requiring full collateralization.
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	We note that there may be a best practice in the ERCOT market, where market participants have to pay for their FTRs at the time of the auction. In contrast, while PJM has a collateral requirement, it has no payment requirement. For example, say a market participant bought an FTR in the auction for \$10, but the FTR turns out to only be worth \$1. If the market participant pays the \$10 up front at the time of auction, that takes away the risk to the broader market that the market participant fails to come up with the \$9 difference between auction price and actual payout.
East Kentucky Power Cooperative, Inc.	Entities with credit rating that is investment grade should be able to trade based on their unsecured credit limit. Entities not rated should be subject to initial margin requirements.
Elliott Bay Energy Trading, LLC	PJM should have a consistent set of credit policies across all markets.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading,	I think adequate capitalization should be required. PJM needs to develop or work with a third party to develop a risk model.

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LLC	
Entergrid Fund I LLC, Lantar Energy LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Ontario Power Generation Energy Trading, Inc., Property Endeavors, LLC, Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP	Yes
Forest Investment Group, LLC	Not sure.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	possibly
Office of the People's Counsel for the District of Columbia	We need more education on the options and the risks.
Old Dominion Electric Cooperative, TEC Trading, Inc.	For some entities, yes. It depends on the financial profile of the counterparty.
Quattro Energy LP	Yes, but only when the collateral computation makes sense - i.e., consider the net position and correlation within the portfolio, instead of straight addition of individual position collateral.
Sanitas Power, LLC	Unsure
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West	Position limits should be limited based on liquidity and the nature of the participant (hedge or spec)Exemptions should be considered for reputable hedgers with demonstrated needs Concentration Limits should be set to a point where a defaulted portfolio could be liquidated without extreme impact to overall market

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Virginia Consumer Advocate Division	liquidity.
Vitol Inc.	Yes, but we'd like to ensure that this can be accomplished in an efficient manner that does not harm liquidity.
4.6 Stakeholder Governance	
Q24. Is it appropriate to establish explicit skillset requirements for stakeholder process participation?	
Direct Energy	Not a bad idea to try to get qualified people but the issue is how you do it. Thinking of a representative delegated but not an expert in the material. Companies would not be happy if there were discussions ongoing regarding FTRs but they were not represented.
Public Power Coalition	Similar cautions to Direct Energy. It is unclear how an advocate or agent relationship would be supported. Understand that we want some genuine experience and expertise but it wouldn't work to exclude others. We need to have the ability to take things back and present them.
PJM ICC	Also agreed and adds one of the tricky things to consider is that there is specialized knowledge in everything we do. We wouldn't want to find ourselves in a tricky area for example DR we would want experts but not to exclude others. We would have challenges with determining which we want specialized knowledge. It is an area to be careful.
CAPS	Concerned that they are being asked to take on costs but not participate in the process. If the consumers are having the risks and costs, they are going to want to be involved. Advocates would not support this.
Tangibl	Echoed prior comments and also concerned that it could set a dangerous precedent to say who is qualified to sit in specific meeting forums.
AEP	The level of engagement and involvement here are self-regulating. So long as you have the right level of engagement from the group, there is no harm in having everyone involved.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Stakeholder cannot set rules for risk requirements. FTR participants are biased to reduce costs or ensure maximum profitability. The only way it might work is those same FTR players bear the risk of defaults. Then they are more likely to get the collateral and participation rules right.

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<p>Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,</p>	<p>No. Such requirements would have a chilling effect on robust participation across all sectors.</p>
<p>Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	<p>Yes. There should be required expertise for participation in certain stakeholder groups TBD. This should be vetted further by the FRMSTF.</p>
<p>Alphataraxia Palladium LLC, BioUrja Power, LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Direct Energy</p>	<p>No</p>

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<p>Business Marketing, LLC, Direct Energy Business, LLC, Direct Energy Services, LLC, Entergy Fund I LLC, Franklin Power LLC, Hartree Partners, LP, Lantar Energy LLC, Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Old Dominion Electric Cooperative, Red Wolf PT, LLC, Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC, TEC Trading, Inc.</p>	
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	<p>No, it is certainly nice to have SMEs engaged in the conversations, but it cannot be required and enforced.</p>
<p>Boston Energy Group, Inc.</p>	<p>I believe that all participants should have a voice, but</p>
<p>Brandon Shores LLC, Brunner Island, LLC, Camden Plant Holding, L.L.C., Elmwood Park Power, LLC, H.A. Wagner LLC, LMBE Project Company LLC, Martins Creek, LLC, MC Project Company LLC, Montour, LLC, Newark</p>	<p>Market participants should be able to manage their stakeholder representation and SME engagement at their discretion.</p>

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Bay Cogeneration Partnership, L.P., Pedricktown Cogeneration Company LP, Susquehanna Nuclear, LLC, Talen Energy Marketing, LLC, York Generation Company, LLC	
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	Member companies should establish own criteria and elect their own members for respective stakeholder groups and committees.
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	a. no requirement for participation b. open to consideration for a voting requirement
Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **	We note that this exists in ERCOT and the Credit Work Group, which is a Board-directed subcommittee, requires voting members to have a financial background. We are not sure this is necessary, but it may be a best practice. ERCOT's Credit Work Group requires experience in one or more of the following fields: Risk management; credit management and analysis; development and/or execution of credit risk policies and procedures; establishment and control of credit limits and terms; finance and/or loan administration; credit ratings analysis; commercial credit analysis; financial analysis.
East Kentucky Power Cooperative, Inc.	Risk management, trading, market policy.
Elliott Bay Energy Trading, LLC	This recommendation is unlikely to work within PJM's established stakeholder processes.
Elmagin Power Fund LLC	No opinion.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy	I don't think this recommendation will work in PJM. But we can work on narrowing down our stakeholder process and managing it better

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Marketing Inc., and Prime Trading, LLC	so that it is more efficient.
Forest Investment Group, LLC	To be developed.
Freepoint Commodities, LLC	no it is not appropriate.
Macquarie Energy, LLC	Needs further refinement and discussion.
Mattawoman Energy, LLC, Panda Hummel Station LLC, Panda Liberty LLC, Panda Patriot LLC, Panda Stonewall LLC, PPGI Fund A/B Development, LLC.	only to the extent that such requirements apply to PJM staff and the market monitor
Office of the People's Counsel for the District of Columbia	No. It is not acceptable to limit stakeholder participation particularly for those stakeholders that will be responsible for the losses. To the extent members or their ratepayers are asked to cover losses they should have a say in the development of solutions. It is not appropriate to establish explicit skillset requirements under the current stakeholder process. The suggested arrangement would be different than any other aspect of the PJM stakeholder process and would necessitate a separate path and a lot of discussion. To the extent there is an expectation that stakeholders need an explicit skillset and do not have that capability it raises that questions about whether these products are appropriate for PJM (and its members).
Ontario Power Generation Energy Trading, Inc.	agree with report recommendations
Property Endeavors, LLC, XO Energy MA, L.P., XO Energy MA2, L.P., XO Energy MA3, LP, XO Energy NY2, LP,	Yes, definitely. Stakeholders that do not understand how certain products or markets operate should not be suggesting or promoting rule changes. If a stakeholder can not provide sufficient evidence or analysis to support such rule changes, then it should be rejected. Why does PJM refuse to take the advice from other market monitors? PJM and the IMM do not always have the best interests of all the PJM stakeholders, so having outside counsel is crucial in developing market design. Consult with
Quattro Energy LP	Training/introduction opportunities for the new participation should be provided, before establish skill set requirements.
Rockland Electric Company	We do not feel it is appropriate to establish explicit skillset requirements under the current stakeholder process. First, to the extent members are asked to cover losses they should have a say in the development of solutions. Second, the suggested arrangement would be different than any other aspect of the PJM stakeholder process and would necessitate a separate path and a lot of discussion. To the extent there is an expectation that stakeholders need an explicit skillset and do not have that capability it raises that questions about

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	whether these products are appropriate for PJM (and its members).
Sanitas Power, LLC	Unsure
Shell Energy North America (US), L.P.	No, this will limit participation.
Southern Maryland Electric Cooperative, Inc.	Yes. Agree with report rec.
Strom Power, LLC	Yes. MIC, MRC and subcommittees and task forces. They should be participating in the markets or at least have participated in the past 18 months. They should have extensive PJM or Power Markets knowledge and experience, not only function expertise (i.e. legal, compliance, etc.).
Tenaska Power Services Co.	Maybe. Largely depends on how this might be implemented.
The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division	No, it is not acceptable to limit stakeholder participation particularly for those stakeholders that will be responsible for the losses. To the extent members are asked to cover losses they should have a say in the development of solutions. It is not appropriate to establish explicit skillset requirements under the current stakeholder process. The suggested arrangement would be different than any other aspect of the PJM stakeholder process and would necessitate a separate path and a lot of discussion. To the extent there is an expectation that stakeholders need an explicit skillset and do not have that capability it raises that questions about whether these products are appropriate for PJM (and its members).
Velocity American Energy Master I, L.P.	Yes. The requirements should be well defined in terms of knowledge of electricity markets and risks and trading/hedging options and products. It would make sense to introduce a qualifier level course and certification to be able to gain entry into the markets.
Vitol Inc.	This would be difficult to develop and enforce. However, PJM should regularly remind stakeholders that it is each stakeholder's responsibility to fully understand all aspects of the issues on which he/she is voting.
a. If so, which stakeholder groups/committees?	
b. If so, what should the requirements be?	

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Q25. Is an existing committee appropriate for the purpose, and if so, which?	
DC Energy	PJM stakeholders have spent a long time determining the committee structure and we are good for now.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Doesn't matter what you call the group
Air Products & Chemicals, Inc., ArcelorMittal USA LLC, Gerdau Ameristeel Energy, Inc., Industrial Energy Users-Ohio, Kimberly-Clark Corporation, Lehigh Portland Cement Company, Letterkenny Industrial Development Authority – PA, MeadWestvaco Corporation, Messer Energy Services, Inc., Messer LLC, Praxair, Inc., Procter & Gamble Paper Products Company (The), Trustees of the University of Pennsylvania, Wellsboro Electric Company,	Question whether the “rule setting” would be just relating to credit. As noted above, fundamental questions must be answered about the benefits of the products themselves to customers. Any financial markets must exist to inure value to the physical markets and recognize the unique nature of power markets that incorporate modeling differences. A strict comparison to financial markets is accordingly not appropriate. To the extent that this question pertains to credit, it may be appropriate to consider a re-tooled Credit Subcommittee that reports to the committee with sector-weighted voting. This subcommittee would need to be informed by the expertise of PJM’s risk management team, including its CRO.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny	TBD - Should be discussed at FRMSTF.

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<p>Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,</p>	
<p>Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,</p>	<p>Stakeholder process participation should not be based on an explicit skillset requirement.</p>
<p>Appian Way Energy Partners MidAtlantic, LLC</p>	<p>It is not PJM's responsibility to ensure that the right people are designated for its stakeholder process. The utilities themselves need to send their subject matter experts. Too often, the stakeholder process is staffed by policy people with political, not technical, agendas. If PJM believes that it is not getting the right expertise, particularly with respect to risk management activity, it would make sense for PJM's Chief Risk Officer or other senior leaders to contact specific market participants and request that they upgrade their delegates.</p>
<p>Atlantic City Electric Company, Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Power Plant, LLC, Commonwealth Edison Company, Constellation Energy Power Choice, LLC, Constellation Energy Services, Inc., Constellation NewEnergy, Inc., Constellation Power Source Generation, LLC, Delmarva Power & Light Company, Exelon Business Services Company, LLC, Exelon Generation Co., LLC, Handsome Lake Energy, LLC, PECO Energy Company, Potomac Electric Power Company,</p>	<p>The Market Implementation Committee is the appropriate forum for handling all PJM markets manners.</p>

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<p>Cork Oak Solar LLC, Fresh Air Energy XVIII, LLC, Fresh Air Energy XXXV, LLC, Hemlock Solar, LLC, HXNAir Solar One, LLC, Milford Solar LLC, PSEG Energy Resources & Trade LLC, PSEG Energy Solutions LLC, PSEG Fossil LLC, PSEG Nuclear LLC, Public Service Electric & Gas Company, Rockfish Solar LLC, Sunflower Solar LLC, Wyandot Solar LLC</p>	<p>We agree with DC Energy. What should be determined is if the Credit Subcommittee at the right hierarchy to be effective.</p>
<p>Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC</p>	<p>Credit Subcommittee.</p>
<p>Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC</p>	<p>We feel the MIC is sufficient for this purpose.</p>
<p>Dynegy Energy Services, LLC, Dynegy Kendall Energy, LLC, Dynegy Marketing and Trade, LLC, Dynegy Power Marketing, LLC, and Vistra Energy **</p>	<p>Credit Subcommittee</p>
<p>Elliott Bay Energy Trading, LLC</p>	<p>The credit subcommittee is an appropriate place for credit and risk management issues to be discussed.</p>

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Elmagin Power Fund LLC	No opinion.
Energy Trading Institute** (a coalition of energy trading firms), GBE Energy Marketing Inc., and Prime Trading, LLC	I think the MIC is fine to handle this issue.
Entergrid Fund I LLC	don't know
Forest Investment Group, LLC	To be developed.
Freepoint Commodities, LLC, Tenaska Power Services Co.	No
Lantar Energy LLC	Yes, members committee
Northstar Capital Management Inc.**, Northstar NY Ltd. **, Northstar SW Ltd. **, Northstar Trading Ltd., Velocity American Energy Master I, L.P.	Not sure
Old Dominion Electric Cooperative, TEC Trading, Inc.	Existing – specifically the credit subcommittee. If it's processes need to be adjusted, those can be streamlined. For example, report into MRC or MC directly.
Ontario Power Generation Energy Trading, Inc.	agree with report recommendation. important to keep decisions streamlined and easily moved to implementation stage
Sanitas Power, LLC	Unsure
Shell Energy North America (US), L.P.	No as there should not be requirements
Solios Power Mid-Atlantic Trading, LLC, Solios Power Mid-Atlantic Virtual, LLC	It would seem unwise to create a new committee to evaluate if there are too many committees.
Southern Maryland Electric	Yes

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Cooperative, Inc.	
Strom Power, LLC	OC or MRC
Vitol Inc.	If this question is referring to which committee should we utilize to streamline governance work on financial markets, then it should be the Market Implementation Committee.
Q26. If not, what should the new committee look like, and which existing committees should it supplant, in order to avoid creating more, committees?	
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Can't work, see Q24 above.
Allegheny Energy Supply Company, L.L.C., American Transmission Systems, Inc., Cleveland Electric Illuminating Company, FirstEnergy Solutions Corp., Jersey Central Power & Light Company, Metropolitan Edison Company, Mid-Atlantic Interstate Transmission, LLC, Monongahela Power Company d/b/a Allegheny Power, Ohio Edison Company, PATH Allegheny Transmission Company, LLC, Pennsylvania Electric Company, Pennsylvania Power Company, Potomac Edison Company d/b/a Allegheny Power, Toledo Edison Company, Trans-Allegheny Interstate Line Company, West Penn Power Company d/b/a Allegheny Power,	TBD - Should be discussed at FRMSTF.

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Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Red Wolf PT, LLC,	Stakeholder process participation should not be based on an explicit skillset requirement.
Dominion Energy Generation Marketing, Inc., Eastern Shore Solar LLC, Southampton Solar LLC, Summit Farms Solar, LLC, Virginia Electric & Power Company, Virginia Solar 2017 Projects LLC	Replace the Credit Subcommittee to formally encompass credit and financial risk management.
Dynergy Energy Services, LLC, Dynergy Kendall Energy, LLC, Dynergy Marketing and Trade, LLC, Dynergy Power Marketing, LLC, and Vistra Energy **	There would be value in making sure PJM hears from experts in credit in how to resolve these things. It would not hurt for PJM to be able to seek out those experts, but it should be done in a way that doesn't exclude anyone.
Elliott Bay Energy Trading, LLC	See Q25 response.
Elmagin Power Fund LLC	No opinion.
Entergrid Fund I LLC	don't know
Forest Investment Group, LLC	To be developed.
Freepoint Commodities, LLC	no committee.
Old Dominion Electric Cooperative, TEC Trading, Inc.	See 25
Shell Energy North America (US), L.P.	There should not be requirements
Velocity American Energy Master I, L.P.	Not sure

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Other	
Q27. Are there any additional questions stakeholders believe should be addressed in this discussion?	
OPSI	Would like to understand the costs that go into Schedule 9-2; costs of FTR Service.
AES Energy Storage, LLC, AES ES Holdings, LLC, AES Laurel Mountain, LLC, and AES Ohio Generation, LLC, Dayton Power & Light Company (The), Miami Valley Lighting, LLC, sPower Energy Marketing, LLC	Should PJM administer any future FTR market other than determine simultaneous feasibility?
Alphataraxia Palladium LLC, DC Energy Mid-Atlantic, LLC, DC Energy, LLC, Franklin Power LLC, Lantar Energy LLC, Red Wolf PT, LLC, Vitol Inc.	No
Boston Energy Trading and Marketing LLC	(1)The Report of the Independent Consultants on the GreenHat Default gives a list of “Complications that Contributed to Today’s GreenHat Situation“. The framing questions do not directly address all complications identified. (2)The Report of the Independent Consultants on the GreenHat Default focuses on the period leading to the default in June 2018. Subsequently, PJM’s management of the portfolio resulted in defaults and costs to the market several orders of magnitude larger than the default itself. In order to appropriately recommend reforms to the market we recommend the independent consultants expand their report to better understand this time period. i. Why did PJM assert lack of liquidity in the July 2018 auction given that the eventually published bids from that auction demonstrated massive liquidity? In July 2018 PJM disclosed no justification for this “lack of liquidity” assertion. ii. Why did PJM use lack of liquidity as a reason to intervene given that FTR feasibility is explicitly accounted for in the default process? iii. What is an appropriate measure of liquidity? iv. PJM communicated different interpretation of the feasibility section over the months following the July auction. Does this section of the Tariff need to be clarified? v. Did PJM estimate the financial impact of submitting a large volume of FTR bids and then canceling before execution? PJM subsequently cleared the auction with market participants’ bids which had been entered with a vastly different set of assumptions.
Direct Energy Business Marketing, LLC, Direct Energy Business, LLC,	How do we measure or determine that the PJM culture is evolving to a better place than that described in the Greenhat default report.

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Direct Energy Services, LLC	
Duke Energy Business Services LLC, Duke Energy Carolinas, LLC, Duke Energy Commercial Enterprises, Inc., Duke Energy Florida, LLC, Duke Energy Kentucky, Inc., Duke Energy Ohio, Inc., Duke Energy Progress, LLC, Duke Energy Renewable Services, LLC	We suggest PJM provide periodic concentration, position, exposure, etc. reports to membership similar to the existing LC and default reports provided quarterly.
East Kentucky Power Cooperative, Inc.	It is important for PJM to develop screens to monitor activities of speculative traders. PJM should encourage compliance hot line reporting where shady activities/ concerns circulate in the market place.
Forest Investment Group, LLC	To be developed.
Office of the People's Counsel for the District of Columbia	Yes, we believe the timing of all these aspects should be considered. For example: - The clock is ticking...decisions need to be made in short order and fixes put in place. - There is a concern about making decisions on any of the matters raised above prior to hiring a CFO/CRO. - The completion of an independent report/review of the products and whether they provide sufficient value to customers is critical prior to making decisions. In addition, there needs to be a discussion of product oversight. First, a clear understanding of the IMM's role in oversight of the products and credit policies is critical. Whatever role the IMM is assigned, it must build the capabilities in-house to adequately meet its duties and must be given access to any and all information necessary for its role. Second, all aspects must have independent oversight. PJM should create an ombudsman with subject mater expertise to respond to issues in the FTR markets, including those raised by other market participants. This individual would report directly to the Markets Committee of the PJM Board who would be empowered to take immediate and necessary action to either prevent or mitigate the costs of a default.
Old Dominion Electric Cooperative, TEC Trading, Inc.	none
Quattro Energy LP	1. The new FTR credit rule creates many layers that adds more cushion, but it didn't really consider the risk correlations among the paths within the same portfolio. As it current goes, it still discounts the risk of portfolio with many concentrated similar exposure, but over-estimates the risk of a big portfolio where risk of correlation is low and diversified, sometimes even negated. In this front, Nodal Exchange does a better job margining the risk of a portfolio that PJM could learn from. 2. The risk and reward should be balanced in FTR market. If default risk is shouldered among financial players and extra collateral requirement are added, then the market should be open to the full utilization of the financial participants including all tenors/products/available nodes, to incentivise the participation and liquidity.

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Strom Power, LLC	<p>One default in 10 years is not a horrible track record. The Greenhat default was exacerbated by the inaction of PJM management, that could have deflated it in 2017 and later in 2018 could have implemented the manual provisions to liquidate the default. It was horrible to listen and watch PJM and some more influential members try to create rules and "risk mitigating" actions on the fly out of fear instead of knowledge and process. This default should have costed us members <1/10 of what it is now. FTR markets are not the cause of the default. PJM and stakeholder actions are. It is bizarre that some members are pushing for a complete review of the FTR market based on the above. FTRs are a very effective market and extremely important to the short term hedging of members and long term capital allocation within the grid. Users will continue to benefit from competitive prices IF FTRs continue playing its role within the grid.</p>
<p>The Delaware Division of the Public Advocate, The Indiana Office of the Utility Consumer Counselor, The West Virginia Consumer Advocate Division</p>	<p>Yes, we believe the timing of all these aspects should be considered. For example:</p> <ul style="list-style-type: none"> - The clock is ticking...decisions need to be made in short order and fixes put in place. - There is a concern about making decisions on any of the matters raised above prior to hiring a CFO/CRO. - The completion of an independent report/review of the products and whether they provide sufficient value to customers is critical prior to making decisions. <p>In addition, there needs to be a discussion of product oversight. First, a clear understanding of the IMM's role in oversight of the products and credit policies is critical. Second, all aspects must have independent oversight.</p> <p>PJM should create an ombudsman to respond to issues in the FTR markets (with subject expertise) and any concerns with PJM staff or management.</p>
The Highlands Energy Group, LLC	<p>As mentioned above, We think the question regarding FTR options should read "Do we need to make more nodes and paths available for FTR options".</p>
Velocity American Energy Master I, L.P.	<p>PJM should have the authority to ban entry of individuals who have faced enforcement action by FERC or other such agencies from participating in markets either directly or through an entity</p>

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