

FTRTF – Poll Results 1/17/13

www.pjm.com



Poll was conducted on options associated with follow criteria:

- Annual ARR/FTR Modeling Structure
- Annual ARR/FTR Capability
- Monthly FTR Auctions
- Long Term FTR Auctions
- Poll question for all design options was as follows:

Please indicate whether you can support (yes/no/maybe)





Poll Results

- High participation
 - 141 responses from members/affiliates covering all sectors.
- Status Quo option for all design criteria had the majority of Yes" responses.
- Status Quo option for each design criteria would pass both majority and sector vote from "Yes" responses only.
 - MIC vote based on majority
 - MRC/MC based on sector weighted
- Several Options would pass both majority and sector weighted if measure using the "Yes + Maybe" responses.
 - Potential to explore these options further



Poll Results - Recommendations

Eliminate Options with low support

Options that would not pass majority and sector vote when including "Yes" + "Maybe" responses.

Further investigation of remaining options

- Options that would pass majority and sector vote when including "Yes" + "Maybe" responses.
- Rank remaining options based on majority and sector vote to determine options with greatest potential to pass both majority and sector if some "Maybe" responses switched to "Yes".
- Further explore reasons for "Maybe" responses.

Anim

FTRTF Matrix

	Design Criteria	В	С	D	Е	F	G	Н	I
1	Annual ARR/FTR Modeling Structure	Eliminate Annual ARR and FTR Process: Allocate all Auction Revenues to Load	Eliminate Annual ARR and FTR Process: Allocate Monthly ARRs	Seasonal ARR/FTR model with reduced rounds					
2	Annual ARR/FTR Capability	ARRs only allowed up to base load	Reduce FTR Capability to 75%. ARRs that are self scheduled will clear full amount. (requires 3D or 3E)	Redefine definition of Zonal Base Load for Stage 1A to reduce to smaller value	Allow use of actual ratings for Stage 1A overallocated facilities in Annual FTR Auction beyond what is necessary for self-scheduled ARRs	Allow member counterflow bids to eliminate or reduce base case infeasibility in Annual FTR Auction: (Requires 2 E)	PJM inject counterflow to eliminate or reduce infeasibility in Annual FTR Auction. (Requires 2E)	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to clear. Annual ARR Self Scheduled bids would still be guaranteed to clear	Reduce ARR and FTR capability on paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing member counter flow bids to clear. Stage 1A ARRs and Annual ARR Self Scheduled bids would still be guaranteed to clear
3	Monthly FTR Auctions	Allow member counterflow	PJM inject counterflow to eliminate or reduce base case infeasibility. PJM will need a criteria as to what facilities to try to reduce or eliminate infeasibilities.	Reduce Capability for non prompt months to 75%. Prompt month capability will remain at 100%. (Requires 2C)	Reduce Capability for prompt and non prompt months to 75%. (Requires 2C)	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to clear.			
4	Long Term FTR Auctions	after reserving Annual ARR capacity	Eliminate Long Term FTR Auction Process	Reduce Capability to 25% of remaining capability after reserving Annual ARR capacity	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to clear.				
5	Day-Ahead Modeling	Convergence between DA and RT							
6	Transmission Planning								
7	M2M Recommendations			<u> </u>			<u> </u>		
	17								



Poll Results- Annual Modeling Structure

			Member and Affiliates						Sector Poll F	Results (Voting Me			
Design Element	Design Option	Poll responses	Yes	Maybe	No	Yes + Maybe	% Yes	% Yes + Maybe	Yes - Sector vote	No - Sector Vote	Yes +Maybe Sector Vote	Do Yes polls pass majority and sector?	notic pace majority
1A	Status Quo	141	130	1	10	131	92.2%	92.9%	4.44	0.50	4.50	Pass	Pass
1B	Eliminate Annual ARR and FTR Process: Allocate all Auction Revenues to Load	140	3	12	125	15	2.1%	10.7%	0.19	4.44	0.56	Fail	Fail
1C	Eliminate Annual ARR and FTR Process: Allocate Monthly ARRs	140	6	23	111	29	4.3%	20.7%	0.44	2.94	2.06	Fail	Fail
1D	Seasonal ARR/FTR model with reduced rounds	140	25	74	41	99	17.9%	70.7%	1.81	2.09	2.91	Fail	Fail



Comments— Annual Modeling Structure Options

Design		
Element	Design Description	Comments associated with Annual Modeling Structure Options
	General Comments	We'd opt to maintain an annual process as this allows for procurement of longer-term FTRs as congestion hedges. Eliminating this structure introduces uncertainty into longer-term transactions.
1 D	Seasonal ARR/FTR model with reduced rounds	We will support a seasonal ARR/FTR model but reject reduced rounds. We do not want to reduce the number of rounds. We want to retain the Annual ARR and FTR process. PJM comments: PJM analysis showed that requirement to complete in two months would require elimination of ARR allocation Stage 2 or reduction of ARR Allocation Stage 2 to two rounds and reduction of Annual. For the seasonal approach, the number of rounds and inputs assumptions (how outages are included, line ratings, etc.) are factors where we need additional information.

www.pjm.com 7 PJM©2013



	A oim					Pol	I Re	esult	S–	Annua	al Capa	bility (Page 1 of	2)
				Membe	r and	Affiliates	3			Sector Poll Results (Voting Members only)				
Design Element	Design Option	Poll responses	Yes	Maybe	No	Yes + Maybe	% Yes	% Yes + Maybe		Yes - Sector vote	No - Sector Vote	Yes +Maybe Sector Vote	Do Yes polls pass majority and sector?	Do Yes + Maybe polls pass majority and sector?
2A	Status Quo	139	105	2	32	107	75.5%	77.0%		3.88	0.99	4.01	Pass	Pass
2B	ARRs only allowed up to base load	137	6	19	112	25	4.4%	18.2%		0.39	4.00	1.00	Fail	Fail
2C	Reduce FTR Capability to 75%. ARRs that are self scheduled will clear full amount. (requires 3D or 3E)	138	33	20	85	53	23.9%	38.4%		0.69	3.67	1.33	Fail	Fail
2D	Redefine definition of Zonal Base Load for Stage 1A to reduce to smaller value	137	10	34	93	44	7.3%	32.1%		0.41	3.88	1.13	Fail	Fail
2E	Allow use of actual ratings for Stage 1A over allocated facilities in Annual FTR Auction beyond what is necessary for self-scheduled ARRs	137	20	87	30	107	14.6%	78.1%		1.73	1.61	3.39	Fail	Pass
2F	Allow member counterflow bids to eliminate or reduce base case infeasibility in Annual FTR Auction. (Requires 2 E)	137	10	80	47	90	7.3%	65.7%		0.63	1.59	3.41	Fail	Pass
2G	PJM inject counterflow to eliminate or reduce infeasibility in Annual FTR Auction. (Requires 2E)	137	4	32	101	36	2.9%	26.3%		0.29	3.88	1.13	Fail	Fail



Poll Results – Annual Capability (Page 2 of 2)

<u> </u>				Membe	r and	Affiliates	,		Sector Poll Results (Voting Members only)			embers only)		
Design Element	Design Option	Poll responses	Yes	Maybe	No	Yes + Maybe	% Yes	% Yes + Maybe		Yes - Sector vote	No - Sector Vote	Yes +Maybe Sector Vote	Do Yes polls pass majority and sector?	Do Yes + Maybe polls pass majority and sector?
2Н	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to clear. Annual ARR Self Scheduled bids would still be guaranteed to clear.	139	29	41	69	70	20.9%	50.4%		2.23	1.84	3.16	Fail	Fail
21	Reduce ARR and FTR capability on paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing member counter flow bids to clear. Stage 1A ARRs and Annual ARR Self Scheduled bids would still be guaranteed to clear	138	26	55	57	81	18.8%	58.7%		1.90	0.94	4.06	Fail	Pass
2J	Allow proration of Stage 1A ARRs if facilities are over allocated. Further legal review would be necessary for this option to ensure this does not violate FERC Long Term Transmission Rights requirements.	137	7	47	83	54	5.1%	39.4%		0.54	3.63	1.38	Fail	Fail
2K	Reduce Capability for Annual FTR Auction. ARRs that are self scheduled will clear full amount. (Reduced capability percentage to be determined if option has enough support)	138	28	33	77	61	20.3%	44.2%		0.77	2.58	2.42	Fail	Fail



Comments— Annual Capability Options

Design		
Element	Design Description	Comments associated with Annual ARR/FTR Capability Options
	General Comments	The timing of changes is important. Any changes should not be implemented until at least the 2014 planning year.
2B	ARRs only allowed up to base load	We might support depending on how much capability is actually reduced. We'd prefer to focus on the specific
2C	Reduce FTR Capability to 75%. ARRs that are self scheduled will clear full amount. (requires 3D or 3E)	We might be able to support this (perhaps at higher % if supported by analysis). We'd want to explore the impacts of the ARR self-schedule guarantee. "Maybe" support for Item 2C is contingent upon clear and transparent rules for PJM participation and/or action.
2D	Redefine definition of Zonal Base Load for Stage 1A to reduce to smaller value	We support this as this seems to directly target one of the main causes of underfunding listed in PJM's FTR report from spring 2012.
2E	Allow use of actual ratings for Stage 1A over allocated facilities in Annual FTR Auction beyond what is necessary for self-scheduled ARRs	We could support this in general, but we'd want to explore the impacts of ARR self-schedule guarantee.
2F	Allow member counterflow bids to eliminate or reduce base case infeasibility in Annual FTR Auction. (Requires 2 E)	We could support participant counterflow bids but would want to know more re: implementation (e.g. would there be a signal from PJM to prompt the necessary counterflow bids?). We might support PJM injection of
2G 2G	PJM inject counterflow to eliminate or reduce infeasibility in Annual FTR Auction. (Requires 2E)	counterflow but would want to know more re: funding of the counterflow (i.e. how would this be allocated to participants?). "Maybe" support for Item 2G contingent on clear and transparent rules for PJM participation and/or action.
	Reduce ARR and FTR capability on paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing member counter flow bids to clear. Stage 1A ARRs and Annual ARR Self Scheduled bids would still	We could support this; however, we want to explore the ARR self-schedule guarantee. We'd also suggest that PJM look at performing day-to-day reductions in ARR/FTR capability/payments for specific binding constraints that contribute to underfunding rather than using historical paths in the annual auction. Doing a day-to-day
21	be guaranteed to clear	reduction on the actual binding constraints seems to target the actual cause.
	Allow proration of Stage 1A ARRs if facilities are over allocated. Further legal review would be necessary for this option to ensure this does not violate FERC Long Term	If transmission system capacity is insufficient to support Stage 1A ARRs, then the transmission system should be
2J	Transmission Rights requirements.	upgraded expeditiously to support the rights.



Poll Results— Monthly FTR Auctions

				Membe	ar and	d Affiliates	s		Sector Poll F	Results (Voting Me	embers only)		1
Design Element	L)Asian ()ntion	Poll responses	Yes	Maybe	No	Yes + Maybe	% Yes	% Yes + Maybe	Yes - Sector vote	No - Sector Vote	Yes +Maybe Sector Vote	Do Yes polls pass majority and sector?	Do Yes + Maybe polls pass majority and sector?
3A	Status Quo	138	112	5	21	117	81.2%	84.8%	4.21	0.59	4.41	Pass	Pass
3B	Allow member counterflow bids to eliminate or reduce base case infeasibility.	137	36	72	29	108	26.3%	78.8%	1.07	0.38	4.63	Fail	Pass
3C	PJM inject counterflow to eliminate or reduce base case infeasibility. PJM will need a criteria as to what facilities to try to reduce or eliminate infeasibilities.	137	6	29	102	2 35	4.4%	25.5%	0.36	3.95	1.05	Fail	Fail
3D	Reduce Capability for non prompt months to 75%. Prompt month capability will remain at 100%. (Requires 2C)	140	36	49	55	85	25.7%	60.7%	0.94	2.06	2.94	Fail	Fail
3E	Reduce Capability for prompt and non prompt months to 75%. (Requires 2C)	140	3	20	117	23	2.1%	16.4%	0.19	4.19	0.81	Fail	Fail
3F	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to clear.	141	47	45	49	92	33.3%	65.2%	3.26	0.71	4.29	Fail	Pass
3G	Reduce Capability for prompt and/or non prompt months. (Reduced capability percentage to be determined if option has enough support)	140	20	28	92	48	14.3%	34.3%	0.56	2.75	2.25	Fail	Fail

www.pjm.com **11** PJM©2013

Comments-	Monthly F	TR Auctions	Options
-----------	-----------	-------------	----------------

1/2		m°	Comments— Monthly FTR Auctions Options						
	Design Element	Design Description	Comments associated with Monthly FTR Auction Options						
		General Comments	The timing of changes is important. Any changes should not be implemented until at least the 2014 planning 3B, 3E, 3G all seem to be a solution, However, rather than an arbitrary number, through analysis, PJM should develop an approach that is based upon system conditions. Perhaps it's not static, and varies monthly						
	3B	Allow member counterflow bids to eliminate or reduce base case infeasibility.	We could support participant counterflow bids but would want to know more re: implementation (e.g. would the						
	3C	PJM inject counterflow to eliminate or reduce base case infeasibility. PJM will need a criteria as to what facilities to try to reduce or eliminate infeasibilities.	be a signal from PJM to prompt the necessary counterflow bids?). We might support PJM injection of counterflow but would want to know more re: funding of the counterflow (i.e. how would this be allocated to participants?).						
	3D	Reduce Capability for non prompt months to 75%. Prompt	It wasn't obvious to us that 3D necessarily requires 2C if applied simply to the capability available after the annual auction.						
	3D	month capability will remain at 100%. (Requires 2C)	We could support this in general, but we'd want to explore the impacts of ARR self-schedule guarantee.						
	3E	Reduce Capability for prompt and non prompt months to 75%. (Requires 2C)	we could support this in general, but we'd want to explore the impacts of ARR sen-schedule guarantee.						
	3F	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not	We could support this; however, we want to explore the ARR self-schedule guarantee. We'd also suggest that PJM look at performing day-to-day reductions in ARR/FTR capability/payments for specific binding constraints that contribute to underfunding rather than using historical paths in the annual auction. Doing a day-to-day						
		involve forcing counterflow bids to clear.	reduction on the actual binding constraints seems to target the actual cause.						

www.pjm.com 12 PJM©2013



Poll Results-Long Term FTR Auctions

	Member and Affiliates										Sector Poll Results (Voting Members only)			
Design Element	Design Option	Poll responses	Yes	Maybe	No	Yes + Maybe	% Yes	% Yes + Maybe		Yes - Sector vote	No - Sector Vote	Yes +Maybe Sector Vote	Do Yes polls pass majority and sector?	Do Yes + Maybe polls pass majority and sector?
4A	Status Quo	140	98	6	36	104	70.0%	74.3%		3.88	0.88	4.13	Pass	Pass
4B	Reduce Capability to 75% of remaining capability after reserving Annual ARR capacity	138	41	61	36	102	29.7%	73.9%		1.01	0.71	4.29	Fail	Pass
4C	Eliminate Long Term FTR Auction Process	138	11	26	101	37	8.0%	26.8%		0.52	2.72	2.28	Fail	Fail
4D	Reduce Capability to 25% of remaining capability after reserving Annual ARR capacity	138	27	62	49	89	19.6%	64.5%		0.83	0.89	4.11	Fail	Pass
4E	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to	139	46	54	39	100	33.1%	71.9%		3.30	0.53	4.48	Fail	Pass
4F	Reduce Capability for Long Term Auctions. (Reduced capability percentage to be determined if option has enough support)	138	28	60	50	88	20.3%	63.8%		0.89	0.83	4.18	Fail	Pass

www.pjm.com 13 PJM©2013



Comments—Long Term FTR Auctions Options

Design Element	Design Description	Comments associated with Long Term FTR Auction Options
		The problems with FTR underfunding don't appear to be caused by issues with the long tem FTR auction
		The timing of changes is important. Any changes should not be implemented until at least the 2014 planning
	General Comments	We want to retain the Long Term FTR Auction process. We would like quarterly Long Term FTR auctions, which provides more granularity. In general, we support 1) NOT awarding infeasible paths; 2) providing more granularity; and 3) treating Self Scheduled and non-Self Scheduled ARR's equally.
		With PJM providing supporting analysis, the volume should be reduced to a number that is reasonably conservative to prevent underfunding.

www.pjm.com 14 PJM©2013



Appendix A Design Element Descriptions

www.pjm.com PJM©2013



Design Element Descriptions – Annual Modeling Structure

Design Element	Design Option	Description	Impact
1A	Status Quo	Same model structure as current. Annual ARR/FTR single model	N/A
1B	Eliminate Annual ARR and FTR Process: Allocate all Auction Revenues to Load	This option will eliminate the Annual ARR and FTR process. FTRs will be available in Monthly Balancing of Planning Period Auctions. ARRs will be eliminated from PJM market and load will be allocated all auction revenues.	Model differences between FTR and Day-Ahead will be reduced and should improve FTR Revenue Adequacy. Monthly Auction Revenues expected to increase.
1C	Eliminate Annual ARR and FTR Process: Allocate Monthly ARRs	This option will eliminate the Annual ARR and FTR process. FTRs will be available in Monthly Balancing of Planning Period Auctions. Monthly ARRs will allocated by PJM based off initial ARR requests made by LSEs before start of planning period.	Model differences between FTR and Day-Ahead will be reduced and should improve FTR Revenue Adequacy. ARRs will be allocated using a more granular model.
1D	Seasonal ARR/FTR model with reduced rounds	Four Separate seasons will be modeled in annual process. All seasons will be cleared during one clearing process. Requirement to complete in two months would require elimination of ARR allocation Stage 2 or reduction of ARR Allocation Stage 2 to two rounds and reduction of Annual FTR Auction to two rounds.	Model more granular. ARR products would be reduced.

www.pjm.com 16 PJM©2013



Design Element Descriptions – Annual Capability

Design Element	Design Option	Description	Impact
2A	Status Quo	100% allocated or auctioned	N/A
2B	ARRs only allowed up to base load	ARRs will not be allocated to zonal peak load but rather zonal base load defined as minimum daily peak.	Less ARRs allocated specifically for zones in which ARRs are not normally prorated in stage 1B or Stage 2. Stage 1A ARRs will not be impacted. Should result in increased FTR Revenue Adequacy.
2C	Reduce FTR Capability to 75%. ARRs that are self scheduled will clear full amount. (requires 3D or 3E)	This reduces the FTR Annual Auction capability to 75%. However, ARRs can still be self scheduled and would fully clear.	Slightly reduces risk if Annual ARR/FTRs are over allocated because of modeling differences. The capability would than be available in prompt month FTR auctions if also choose option 3D. ARR values should be similar as current but monthly auction revenue might be necessary to fully fund ARRs. Monthly Auction revenues should to be higher with this method if choose option 3D because of the available capability in prompt month.
2D	Redefine definition of Zonal Base Load for Stage 1A to reduce to smaller value	This will change the definition for the zonal base load which is maximum amount an LSE may request in stage 1A.	This will reduce chances of stage 1A infeasibilities because the requests will be reduced.
2E	Allow use of actual ratings for Stage 1A over allocated facilities in Annual FTR Auction beyond what is necessary for self-scheduled ARRs	This will eliminate the current Tariff requirement that the increased rating for stage 1A infeasible facilities must be used for all future allocations and auctions for planning period. However, the self scheduled ARRs will first have to be modeled and allowed to clear.	Most likely this will result in all facilities being feasible from annual FTR model assuming the self scheduled ARRs do not go above the rating. Typically about 40-60% of ARRs are self scheduled which should allow to use actual ratings in Annual FTR Auction. This option could reduce annual auction revenues below level to fund ARRs because less capability is available. However, ARR holders can still be fully funded through monthly and long term auction revenues.
2F	Allow member counterflow bids to eliminate or reduce base case infeasibility in Annual FTR Auction. (Requires 2 E)	This is the same as 2E but with the addition that if the self scheduled ARRs flows are greater than the rating than counterblow will be allowed to be cleared to reduce flow to rating.	Same as 2E but with an increased chance of lower annual auction revenues.
2G	PJM inject counterflow to eliminate or reduce infeasibility in Annual FTR Auction. (Requires 2E)	This is same as 2F but PJM will actually submit counterflow bids at a price likely to clear.	Same as 2F but since PJM is actually submitting the bid the auction revenues could be much lower because the bid price would need to be really low. There is a larger risk with this option of lower revenues.



Design Element Descriptions – Annual Capability

Design Element	Design Option	Description	Impact
2H	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing counterflow bids to clear. Annual ARR Self Scheduled bids would still be guaranteed to clear.	This involves using lower ratings in FTR Annual Auction on facilities that have historically caused FTR Revenue Inadequacy. Annual ARR Self Scheduled bids would still be guaranteed to clear.	This will reduce the underfunding but may be difficult to apply if the historical underfunded facilities are already overallocated in ARR process or because of auction outages. This could result in Annual FTR Auction revenues be insufficient to cover ARR target allocations.
21	Reduce ARR and FTR capability on paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding. This does not involve forcing member counter flow bids to clear. Stage 1A ARRs and Annual ARR Self Scheduled bids would still be guaranteed to clear	This involves using lower ratings in ARR Allocation and FTR Annual Auction on facilities that have historically caused FTR Revenue Inadequacy. Stage 1A and Annual ARR Self Scheduled bids would still be guaranteed to clear.	Stage 1A ARRs will not be impacted. Should result in increased FTR Revenue Adequacy.
2J	Allow proration of Stage 1A ARRs if facilities are over allocated. Further legal review would be necessary for this option to ensure this does not violate FERC Long Term Transmission Rights requirements.	This would allow proration of stage 1A facilities if requests create flow above facility limits. Further review would be necessary to ensure this does not violate the FERC Long Term Transmission Rights Requirements	This would improve FTR Revenue Inadequacy.
2К	Reduce Capability for Annual FTR Auction. ARRs that are self scheduled will clear full amount. (Reduced capability percentage to be determined if option has enough support)	This reduces the FTR Annual Auction capability to a value to be determined. However, ARRs can still be self scheduled and would fully clear.	Slightly reduces risk if Annual ARR/FTRs are over allocated because of modeling differences. The capability would than be available in prompt month FTR auctions depending on monthly option choice. ARR values should be similar as current but monthly auction revenue might be necessary to fully fund ARRs. Monthly Auction revenues should to be higher with this method because of the available capability in prompt month.



Design Element Descriptions – Monthly FTR Auctions

Design Element	Design Option	Description	Impact
3A	Status Quo	Prompt and non prompt month auction periods modeled as 100% of remaining capability.	N/A
3B	Allow member counterflow bids to eliminate or reduce base case infeasibility.	This option will allow member counter flow bids to reduce infeasibilities. Monthly auction cases are always infeasible after outages are modeled and currently PJM increases ratings to have a baseline feasible case before bids are submitted.	This will result in much smaller monthly auction revenues and might even be negative. It is likely that all infeasibilities will not be eliminated and PJM would need to develop criteria of what facilities to try to eliminate infeasibilities along with a minimum revenue threshold.
3C	PJM inject counterflow to eliminate or reduce base case infeasibility. PJM will need a criteria as to what facilities to try to reduce or eliminate infeasibilities.	PJM will submit bids in auction to help reduce base case infeasibilities. Monthly auction cases are always infeasible after outages are modeled and currently PJM increases ratings to have a baseline feasible case before bids are submitted.	Same challenges as 3B but much more difficult to implement from a process standpoint.
3D	Reduce Capability for non prompt months to 75%. Prompt month capability will remain at 100%. (Requires	Monthly auction capability for all non prompt month periods would be reduced to 75%.	This will reduce risks associated with future periods in which model is not as robust. This really only makes sense if option 2C is also implemented.
3E	Reduce Capability for prompt and non prompt months to 75%. (Requires 2C)	Monthly auction capability for all periods would be reduced to 75%.	This will reduce risks associated with future periods in which model is not as robust. This really only makes sense if option 2C is also implemented.
3F	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding.	This involves using lower ratings in FTR Monthly Auctions on facilities that have historically caused FTR Revenue Inadequacy.	This will reduce the underfunding but may be difficult to apply if the historical underfunded facilities are already overallocated in ARR process or because of auction outages. This will result in lower auction revenues.
3G	Reduce Capability for prompt and/or non prompt months. (Reduced capability percentage to be determined if option has enough support)	Monthly Auction capability would be reduced.	This will reduce risks associated with future periods in which model is not as robust. This really only makes sense if option 2K is also implemented.

www.pjm.com 19 PJM©2013



Design Element Descriptions – Long Term FTR Auctions

Design Element	Design Option	Description	Impact
4A	Status Quo	Three rounds with 1/3 available in each round after all current ARRs are modeled.	N/A
4B	Reduce Capability to 75% of remaining capability after reserving Annual ARR capacity	This will reduce the capability even further than Status Quo	Impact small but will reduce risk associated with model being different than actual conditions. Impact small because Long term Auction already has limited capability
4C	Eliminate Long Term FTR Auction Process	This will eliminate the long term FTR auction	This will eliminate all risk associated with future planning period models but would move away from the long term FTR rights objective.
4D	Reduce Capability to 25% of remaining capability after reserving Annual ARR capacity	This will reduce the capability even further than Status Quo	Impact small but will reduce risk associated with model being different than actual conditions. Impact small because Long term Auction already has limited capability
4E	Reduce FTR capability on FTR paths which have been significantly and persistently underfunded to a level designed to eliminate that underfunding.	This involves using lower ratings in FTR Long Term Auctions on facilities that have historically caused FTR Revenue Inadequacy.	This might slightly reduce the underfunding but may be difficult to apply if the historical underfunded facilities are already overallocated in ARR process or because of auction outages. This will result in lower auction revenues.
4F	Reduce Capability for Long Term Auctions. (Reduced capability percentage to be determined if option has enough support)	This will reduce the capability even further than Status Quo	Impact small but will reduce risk associated with model being different than actual conditions. Impact small because Long term Auction already has limited capability.

www.pjm.com **20** PJM©2013