

# 100 MW Wind Farm and Solar Farm Examples Under Two Solution Alternatives

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March 4, 2022

Special Sessions of the PC on CIRs for  
ELCC Resources

1. Proposal “increase deliv per CIR\_MW”
  - This is comparable to Package D, which PJM offered
2. Proposal “increase CIR eligibility”
  - This is comparable to Package E, which LS Power offered



# Illustrative New 100 MW Wind Farm Example

*Hypothetical Values for Illustration*

	MFO	CIRs	DelivMW	UCAP	Upgrade cost to gen	Upgrade cost to load
Proposal “increase deliv per CIR_MW”	100	13	38	15	100%	0%
Proposal “increase CIR eligibility”	100	38	38	15	100%	0%



# Illustrative New 100 MW Tracking Solar Farm Example

*Hypothetical Values for Illustration*

	MFO	CIRs	DelivMW	UCAP	Upgrade cost to gen	Upgrade cost to load
Proposal “increase deliv per CIR_MW”	100	60	84	54	100%	0%
Proposal “increase CIR eligibility”	100	84	84	54	100%	0%



# Existing 100 MW Wind Farm Example

*Hypothetical Values for Illustration*

	MFO	Old CIRs	New CIRs	Old DelivMW	New DelivMW	Old UCAP Offered	New UCAP Offered	Cost to gen to increase DelivMW from old to new	Cost to load to increase DelivMW from old to new
Proposal "increase deliv per CIR_MW"	100	13	13	13	38	13	15	0%	100% (\$0 for all wind with ISAs)
Proposal "increase CIR eligibility"	100	13	38	13	38	13	15	100% (\$0 for all wind with ISAs)	0%



# Existing 100 MW Tracking Solar Farm Example

*Hypothetical Values for Illustration*

	MFO	Old CIRs	New CIRs	Old DelivMW	New DelivMW	Old UCAP Offered	New UCAP Offered	Cost to gen to increase DelivMW from old to new	Cost to load to increase DelivMW from old to new
Proposal "increase deliv per CIR_MW"	100	60	60	60	84	60	54	0%	100% (\$0 for all in service solar)
Proposal "increase CIR eligibility"	100	60	84	60	84	60	54	100% (\$0 for all in service solar)	0%



# Process for 100 MW Existing Wind Farm

	Proposal “increase deliv per CIR_MW” 100 MW Wind Farm	Proposal “increase CIR eligibility” 100 MW Wind Farm
Status quo (ELCC. Note 15% wind rating exceeds CIRs)	CIRs = 13 MW DelivMW = 13 MW UCAP offered = 13 MW	CIRs = 13 MW DelivMW = 13 MW UCAP offered = 13 MW
Immed. following rule change	CIRs = 13 MW DelivMW = 13 MW UCAP = 13 MW* ( <b>MWh not yet capped at DelivMW</b> )	CIRs = 13 MW DelivMW = 13 MW <b>UCAP = lower than 13 MW* (MWh capped at DelivMW)</b>
After milestone reached	<b>Milestone: More delivMW in RTEP</b> CIRs = 13 MW <b>DelivMW = 38 MW</b> UCAP = <b>15 MW*</b> ( <b>MWh capped at DelivMW</b> )	<b>Milestone: CIR uprate in Queue</b> <b>CIRs = 38 MW</b> <b>DelivMW = 38 MW</b> <b>UCAP = 15 MW*</b> ( <b>MWh capped at DelivMW</b> )
Long term	Same as “after milestone reached”	Same as “after milestone reached”

*\*ELCC Class Ratings change annually, so this future UCAP could be more or less than 15 MW. Until MWh values are capped, UCAP should not exceed CIRs. The impact of capping hourly output at the higher DelivMW levels is not expected to be significant.*



# Process for 100 MW Existing Tracking Solar Farm

	Proposal “increase deliv per CIR_MW” 100 MW Solar Farm	Proposal “increase CIR eligibility” 100 MW Solar Farm
Status quo (ELCC. Tracking solar rating is 54%)	CIRs = 60 MW DelivMW = 60 MW UCAP = 54 MW	CIRs = 60 MW DelivMW = 60 MW UCAP = 54 MW
Immed. following rule change	CIRs = 60 MW DelivMW = 60 MW UCAP = 54 MW* <b>(MWh not yet capped at DelivMW)</b>	CIRs = 60 MW DelivMW = 60 MW <b>UCAP = lower than 54 MW*</b> <b>(MWh capped at DelivMW)</b>
After milestone reached	<b>Milestone: More delivMW in RTEP</b> CIRs = 60 MW <b>DelivMW = 84 MW</b> UCAP = 54 MW* <b>(MWh capped at DelivMW)</b>	<b>Milestone: CIR uprate in Queue</b> <b>CIRs = 84 MW</b> <b>DelivMW = 84 MW</b> <b>UCAP = 54 MW* (MWh capped at DelivMW)</b>
Long term	Same as “after milestone reached”	Same as “after milestone reached”

*\*ELCC Class Ratings change annually, so this future UCAP could be more or less than 54 MW. Until MWh values are capped, UCAP should not exceed CIRs. The impact of capping hourly output at the higher DelivMW levels is not expected to be significant.*

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**100 MW Wind Farm and Solar Farm  
Examples Under Two Solution Alternatives**



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