

# Table of Changes

MARS Version 3.18 revisions			
Revision	Description	Effects	Result on LOLE
New Intel Compiler	Floating Point algorithm is different	Rounding differences are noticed in the transmission flow and margin state summaries.	No effect on LOLE calculation
64 Bit version	Runs on 64 Bit windows	Performance improvement of about 20 – 30 %	No effect on LOLE calculation
EOP step increases	MARS now allows for up to 20 EOP steps. Also, the last EOP step may now be input with 0 MW.	No differences noted	No effect on LOLE calculation
Daily Peak Logic Change	Allows for using the daily peak of each load level to calculate the daily LOLE	This represents a change in the approved methodology to use the peak hour of the Base Load Shape for daily LOLE calculations	Switch not currently activated
Maintenance model updates	Allows option to zero fixed on non-thermal units	Not Applicable to our model	No effect on LOLE calculation
Area Group reporting	Output file updated	No effect on calculations	No effect on LOLE calculation
LFU update	Gives warning if more than one PROB line input	Not Applicable to our model.	No effect on LOLE calculation

# What Happens on 8/8 currently

Zone A Peak on 8/8				Zone A Peak on 8/8			
Example of Actual				Current Procedure			
<u>LOLE calculation Hour</u>				<u>LOLE calculation Hour</u>			
	<u>Day</u>	<u>HB</u>			<u>Day</u>	<u>HB</u>	
2007	8/8	1400		2007	8/8	1400	
2006	8/8	1300		2006	8/8	1400	
2002	8/8	1500		2002	8/8	1400	

Currently, if the actual hour of peak was 1300, the test for LOLe (Loss Of Load event) would occur during hour 1400 for shapes 2006 and 2002.

Current setting #1 is to test at times of daily peak  
 Current setting #2 is to use the times of daily peak from the Base load shape (2007 here) to test for LOLe

# What Happens on 8/8 – new feature

Zone A Peak on 8/8 Current Procedure			Zone A Peak on 8/8 New Feature		
<b><u>LOLE calculation Hour</u></b>			<b><u>LOLE calculation Hour</u></b>		
	<u>Day</u>	<u>HB</u>		<u>Day</u>	<u>HB</u>
2007	8/8	1400	2007	8/8	1400
2006	8/8	1400	2006	8/8	1300
2002	8/8	1400	2002	8/8	1500

The new feature is an improvement on calculation of the index because it captures more LOL events. To suggest the current method is a mistake is like being a Monday morning quarterback.