

Upcoming iCRS Changes

Presented By:
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November 5, 2020 and November 19, 2020



Agenda

- What's Happening and Why
- iCRS Generation Advisor (GA)
 - Display changes: current and new GA
 - Configuration options in new GA
 - Demo
- Request for Beta Testers

What's Happening and Why

- iCRS is built using the Adobe Flash graphics package
- Major browsers (i.e. Internet Explorer, Chrome) will stop supporting Adobe Flash at the end of the year
- BPA is transitioning iCRS from the Adobe Flash platform to a React Javascript framework with Sencha components

What's Happening and Why (cont.)

- This transition will impact iCRS Generation Advisor users
 - New Generation Advisor will be launched in December 2020
 - BPA is optimizing Generation Advisor for FireFox ESR 78
 - Microsoft Internet Explorer will NOT support the new Generation Advisor
 - Microsoft Edge V86 and above will support it

Display Changes: Current GA

iCRS GenerationAdvisor 5.1.7 (DCCE TEST) 14:10:09 Kevin Johnson1 - BPA (Plant Marketer) **Log Out** ⚙️

Nov 03 HE: 15 DEPLOYED RESERVES: **5% (2%)** **NORMAL** 0:00 Alarms Test Updated: **03 Nov 14:10:01** Data Latency: **14.9 S** Time Delta: **218 mS**

Balancing Authority Info Trend Dashboard Chart Events

Balancing Reserves

- Max Inc Reserves 724 MW
- Deployed Reserves 38 MW
- Potential Dep Reserves 17 MW
- Max Dec Reserves -903 MW

Wind

- Total Generation 479 MW
- Total Scheduled 436 MW
- Total SCE 45 MW

System

- Net Generation 10,138 MW
- Net Load 6,329 MW
- Net Actual Interchange 3,808 MW
- Net Sched Interchange 3,802 MW
- Frequency 60.015 Hz

Balancing Authority Trended Values Chart Options: 24 Hour 8 Hour 2 Hour 30 Minute 5 Minute Scale to Wind Nameplate

13:00:00 14:00:00

Plant Info VER Hydro Thermal Other Tabular Trend e-Tags Chart Forecast

Plant Name (4)	Plant	Operator	Actual	Sched	SCE	Scd Val	HE+1	Dec Res Alloc	Dep Res	Inc Res Alloc	Limit Target	Curtail Target	Indv Limit
ALL PLANTS	TOTAL	ALL OPERATORS	56	68	-12	66	76	-76	12	59	104	104	
Chaff Point Wind	CPW	Demo Energy	46	63	-17	54	71	-43	17	33	106	79	
Gale Farm Hills	GFH	Demo Energy	0	0	0	0	0	-13	0	10	13	10	
Velma Creek	VLM	Demo Energy	0	0	0				0		0		
iCRS Canyon Wind Phase 1	ICW	Demo Energy	10	5	5	12	5	-20	-5	16	25	25	

Display Changes: New GA

iCRS Generation Advisor (5.1.7) - doce.test 2:24:11 PM Kevin Johnson1 - BPA (PM)

Deployed Reserves

-10% (0%)

Normal

Application Status

Nov 03 14:24:11

Trends Values

Balancing Reserves

- Max Inc Reser... 724 MW
- Deployed Rese... -92 MW
- Potential Dep R... -3 MW
- Max Dec Res... -903 MW

Wind

- Total Generati... 491 MW
- Total Schedul... 462 MW
- Total SCE 32 MW

System

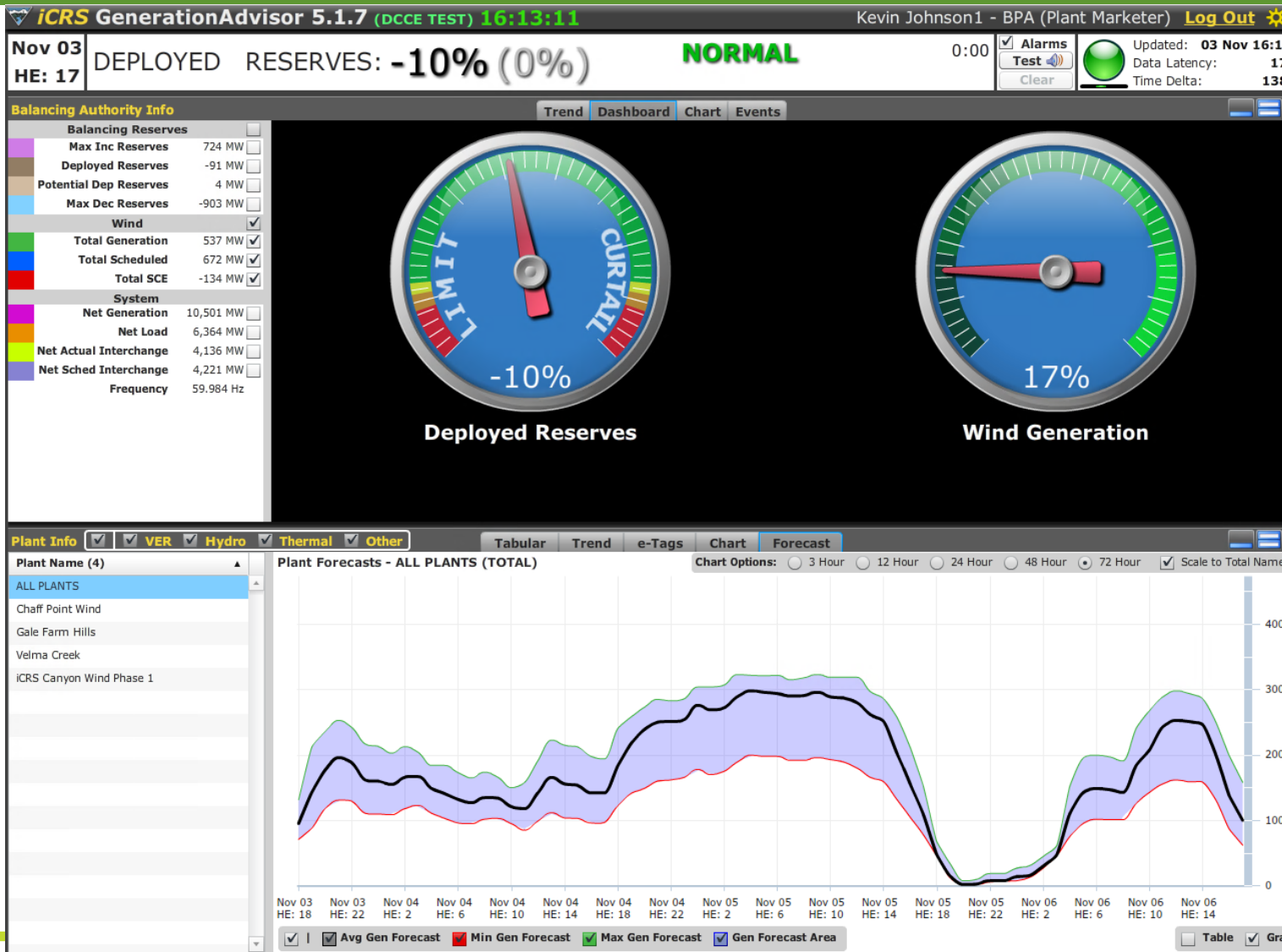
- Net Genera... 10136 MW
- Net Load 6286 MW
- Net Actual In... 3850 MW
- Net Sched In... 3926 MW
- Total Hydro S... 999 MW
- Total Thermal ... 999 MW

Balancing Authority Trend

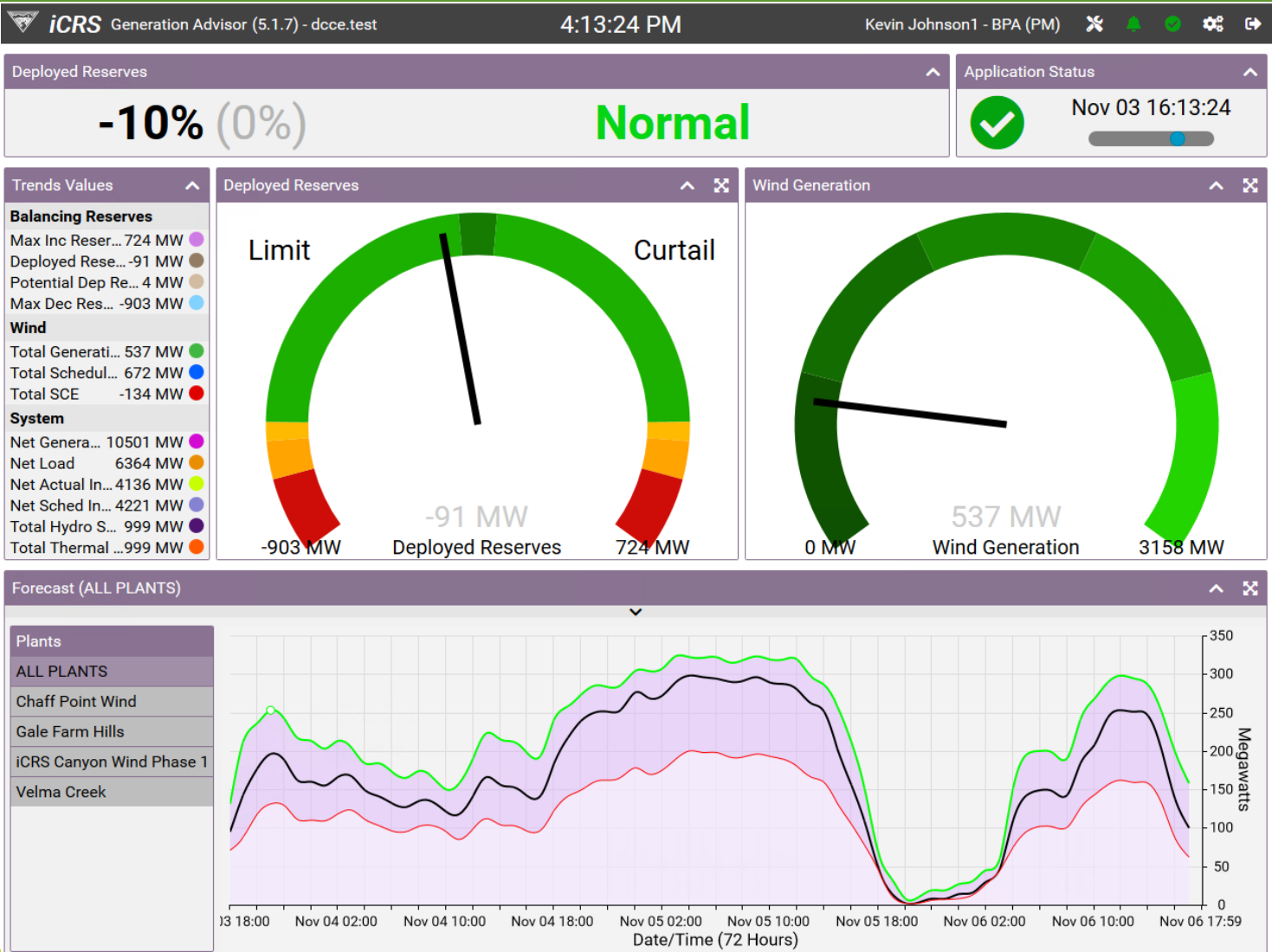
Plant Info

4/4 Plants												
Plant Name	Plant	Operator	Actual	Scheduled	SCE	Scd Value	HE + 1	Dec Res All...	Dep Res	Inc Res Alloc	Limit Target	Cur
ALL PLANTS	TOTAL	ALL OPERA...	45.00	68.00	-23.00	50	61	-76	23.00	59	144.00	104
Chaff Point...	CPW	Demo Ener...	39.00	63.00	-24.00	41	58	-43	24.00	33	106.00	71.0
Gale Farm ...	GFH	Demo Ener...	0.00	0.00	0.00	0	0	-13	0.00	10	13.00	10.0
iCRS Canyo...	ICW	Demo Ener...	6.00	5.00	1.00	9	3	-20	-1.00	16	25.00	23.0
Velma Creek	VLM	Demo Ener...	0.00	0.00	0.00				0.00		0.00	

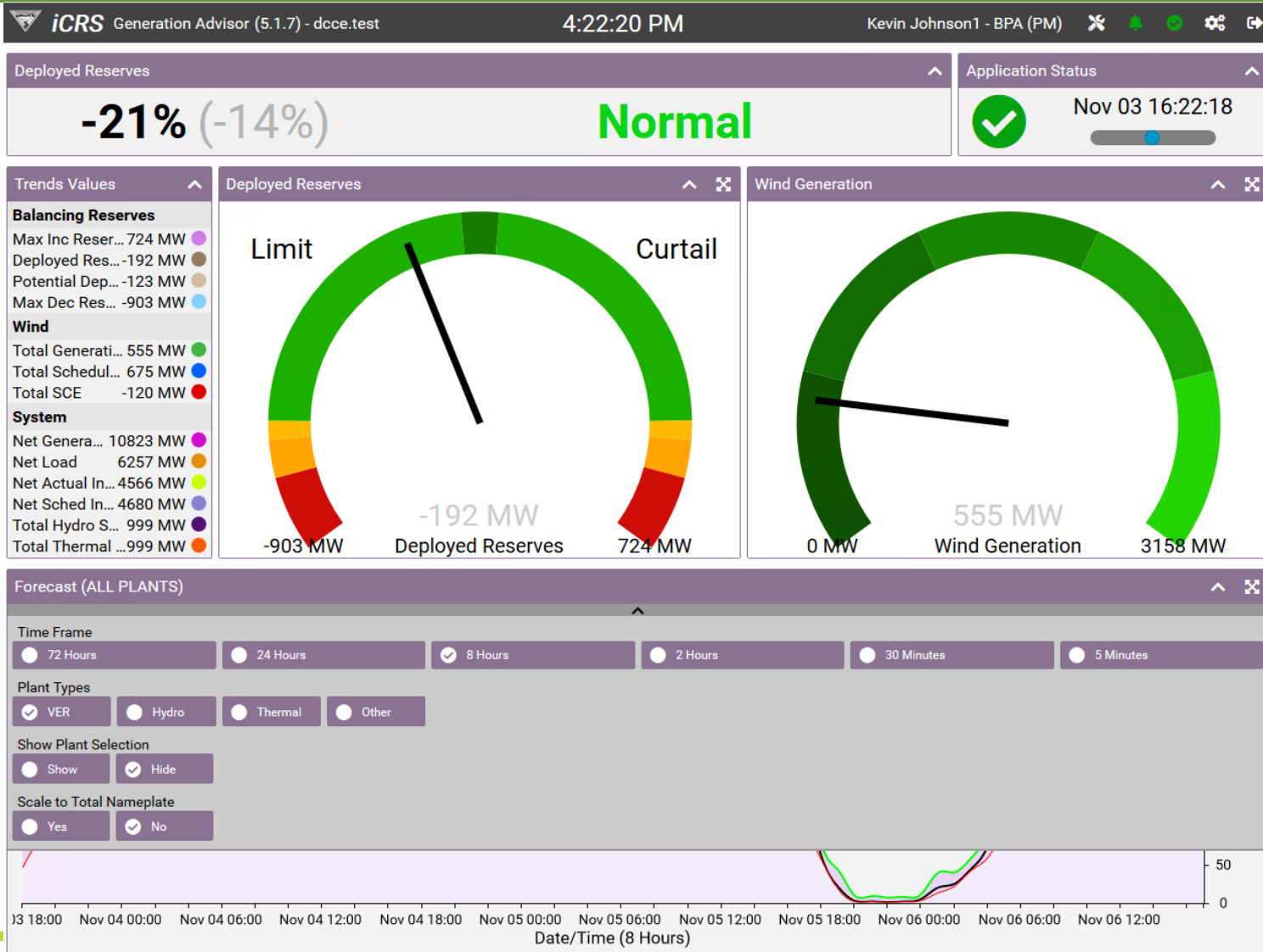
Display Changes: Current GA



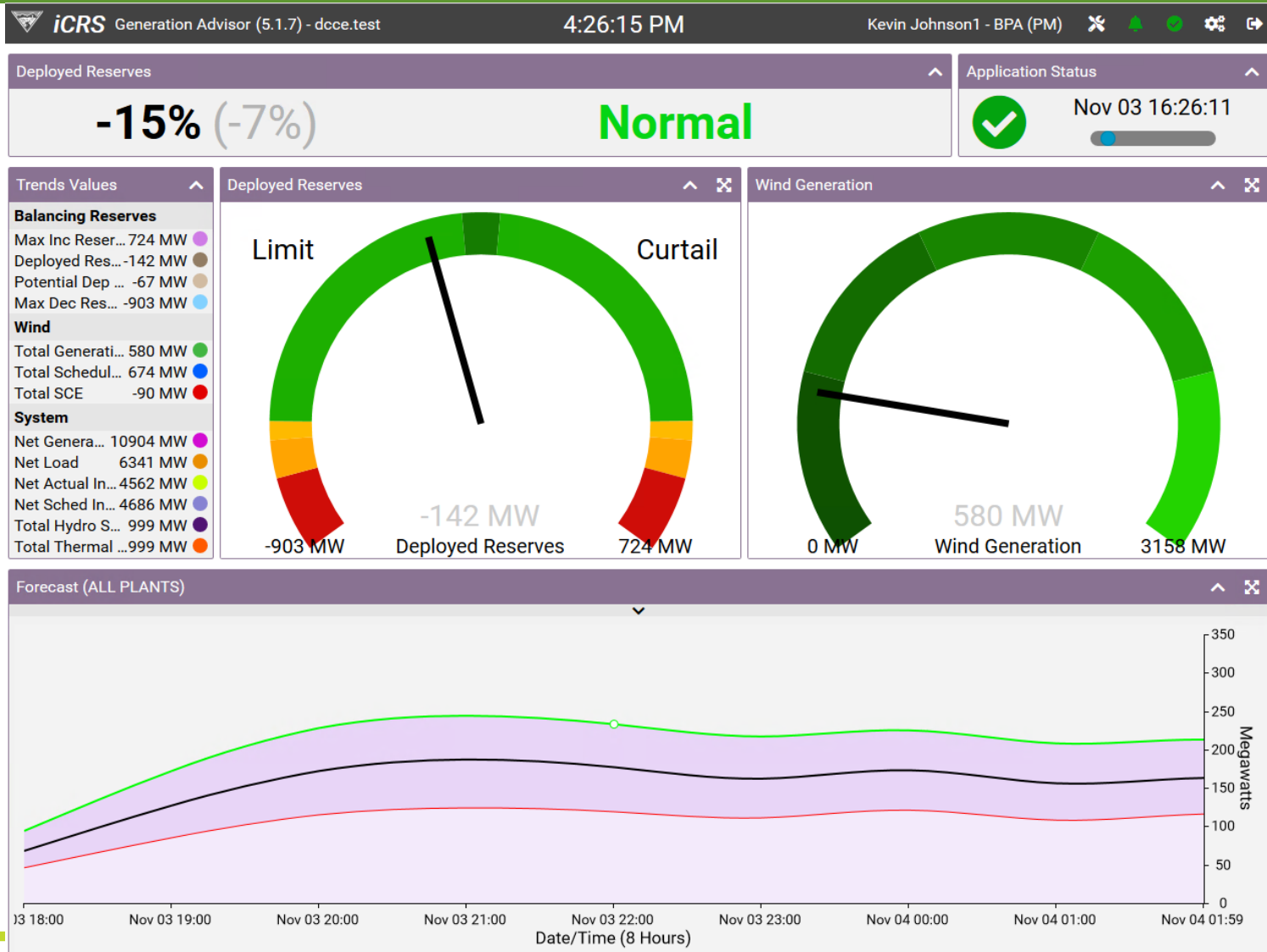
Display Changes: New GA



Configuration Options: Forecast Panel



Configuration Options: Forecast Panel (cont.)



Configuration Options: Panel Layout

The screenshot displays the 'iCRS Generation Advisor (5.1.7) - dccc.test' application interface. A 'Panel Layout' configuration window is open, showing a list of panels and their widths. The background interface includes a 'Deployed Reserves' gauge at -15% (-1%), a 'Limit' gauge, and a 'Forecast (ALL PLANTS)' line chart.

Enabled Panels	Width
Trend Values	2/12
Deployed Reserves Gauge	5/12
Wind Generation Gauge	5/12
Forecast	12/12 (100%)

Add Panel dropdown options:

- Plant Info
- Plant Info
- Balancing Authority Trend
- e-Tags
- Bar Charts

Background Interface Data:

- Deployed Reserves: -15% (-1%)
- Limit: Limit
- Forecast (ALL PLANTS): 584 MW
- Wind Generation: 3158 MW
- Other values: -903 MW, 724 MW, 0 MW

Configuration Options: Panel Layout (cont.)

ICRS Generation Advisor (5.1.7) - dcce.test 4:28:11 PM Kevin Johnson1 - BPA (PM)

Deployed Reserves **-13% (4%)** **Normal** Application Status Nov 03 16:28:08

Trends Values Deployed Reserves Wind Generation

Forecast (ALL PLANTS)

Plant Info

4/4 Plants												
Plant Name	Plant	Operator	Actual	Scheduled	SCE	Scd Value	HE + 1	Dec Res All...	Dep Res	Inc Res Alloc	Limit Target	Cur
ALL PLANTS	TOTAL	ALL OPERA...	53.00	91.00	-38.00	53	68	-76	38.00	59	167.00	113
Chaff Point...	CPW	Demo Ener...	52.00	85.00	-33.00	53	64	-43	33.00	33	128.00	86.0
Gale Farm ...	GFH	Demo Ener...	0.00	0.00	0.00	0	0	-13	0.00	10	13.00	10.0
ICRS Canyo...	ICW	Demo Ener...	1.00	6.00	-5.00	0	4	-20	5.00	16	26.00	17.0
Velma Creek	VLM	Demo Ener...	0.00	0.00	0.00				0.00		0.00	

Configuration Options: Display Preferences

The screenshot displays the ICRS Generation Advisor (5.1.7) interface. A 'Preferences' dialog box is open, showing options for 'Theme' (Light or Dark) and 'Panel Height' (Short or Tall). The background features a line chart titled 'Forecast (ALL PLANTS)' showing Megawatts over time from 13:00 on Nov 03 to 01:59 on Nov 04. Below the chart is a 'Plant Info' table with 12 columns: Plant Name, Plant, Operator, Actual, Scheduled, SCE, Scd Value, HE + 1, Dec Res All..., Dep Res, Inc Res Alloc, Limit Target, and Cur.

Plant Name	Plant	Operator	Actual	Scheduled	SCE	Scd Value	HE + 1	Dec Res All...	Dep Res	Inc Res Alloc	Limit Target	Cur
ALL PLANTS	TOTAL	ALL OPERA...	51.00	91.00	-40.00	53	68	-76	40.00	59	167.00	180
Chaff Point...	CPW	Demo Ener...	51.00	85.00	-34.00	52	64	-43	34.00	33	128.00	84.0
Gale Farm ...	GFH	Demo Ener...	0.00	0.00	0.00	0	0	-13	0.00	10	12.00	18.0
ICRS Canyo...	ICW	Demo Ener...	0.00	6.00	-6.00	1	4	-20	6.00	16	26.50	18.0
Velma Creek	VLM	Demo Ener...	0.00	0.00	0.00				0.00		0.00	

Configuration Options: Display Preferences (cont.)



Configuration Options: Display Options



Configuration Options: BA Trends

The screenshot displays the iCRS Generation Advisor (5.1.7) interface. A 'Trends Options' dialog box is open, allowing configuration of the Balancing Authority (BA) Trends view. The dialog includes the following sections:

- Time Display:** Radio buttons for 24 Hours, 8 Hours (selected), 2 Hours, 30 Minut..., and 5 Minutes.
- Display Options:**
 - Legend: Show, Hide
 - Scale to Wind Capacity: Yes, No
- Labels:**
 - Balancing: Max Inc: Show, Hide
 - Balancing: Deployed: Show, Hide
 - Balancing: Potential Dep: Show, Hide
 - Balancing: Max Dec: Show, Hide
 - Wind: Total Generation: Show, Hide
 - Wind: Total Scheduled: Show, Hide
 - Wind: Total SCE: Show, Hide

Buttons for 'Save' and 'Set to Default' are at the bottom of the dialog. The background interface shows a 'Deployed Reserves' gauge at 4% (24%), a 'Balancing Authority Trend' chart, and two circular gauges for 'Limit' (36 MW) and 'Wind Generation' (551 MW).

Configuration Options: BA Trends (cont.)



Request for Beta Testers

- BPA is looking for beta testing volunteers
 - Synchronous
 - Asynchronous
- If you're interested, please contact iCRS Operations and we will send you a list of items in scope for beta testing
- iCRSOperations@bpa.gov with subject of "Beta Feedback"

The End

- Questions or Comments to
 - iCRSOperations@bpa.gov