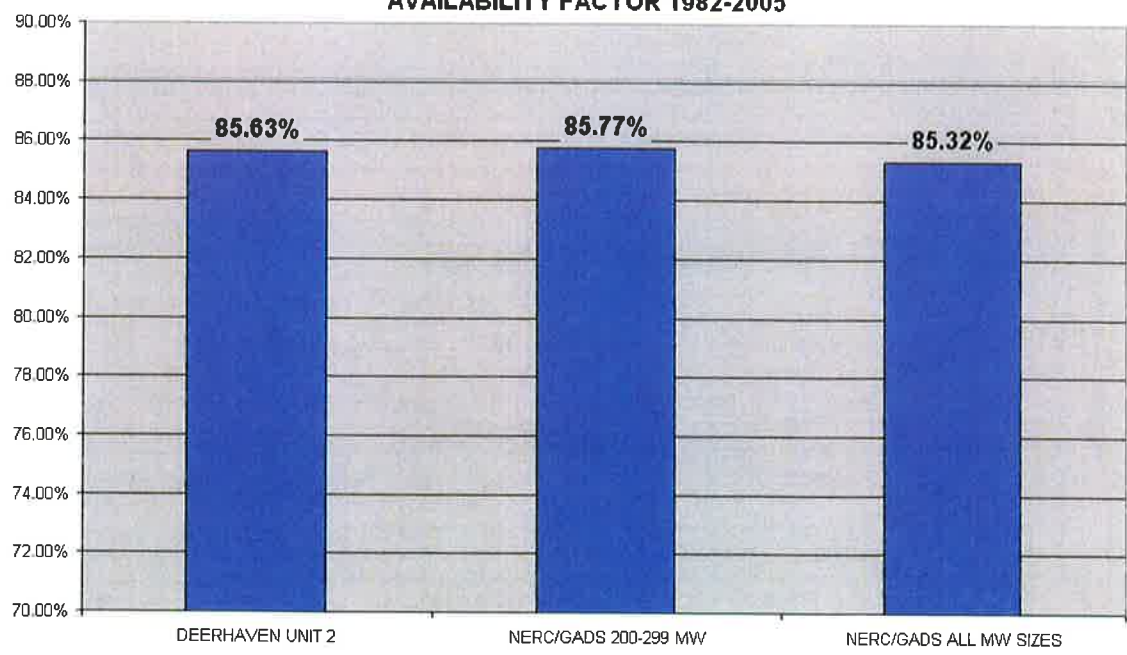


GRU Generation and Capacity Events of August 29 & 30, 2007

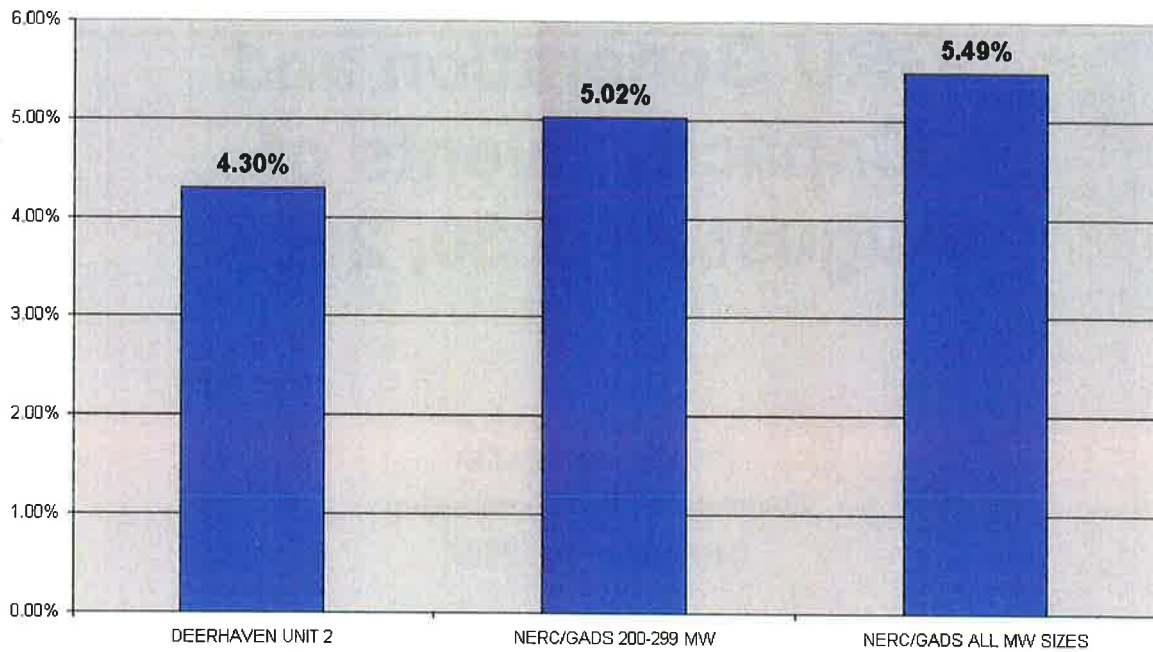
Presentation to the
Gainesville City Commission
September 24, 2007



**DEERHAVEN UNIT 2
AVAILABILITY FACTOR 1982-2005**

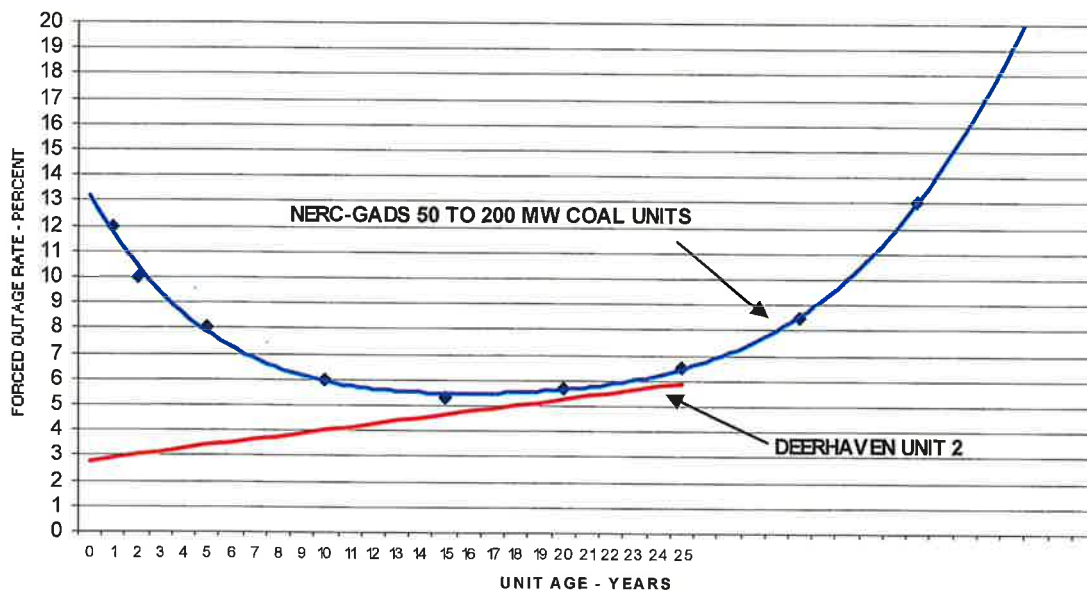


**DEERHAVEN UNIT 2
FORCED OUTAGE RATE
1982-2005**



3

FORCED OUTAGE RATE VS UNIT AGE



4

AGE OF IN-SERVICE GENERATING CAPACITY

Unit Name	Age in Years	Summer Net Capacity (MW)	Capacity (% of Total)
JRK FS7	46	23	4%
JRK FS8	42	37	6%
JRK GT1	39	14	2%
JRK GT2	39	14	2%
JRK GT3	38	14	2%
DH FS1	35	83	14%
DH GT1	31	18	3%
DH GT2	31	18	3%
CR3	30	11	2%
DH FS2	26	228	37%
DH GT3	11	75	12%
JRK GT4	6	75	12%
SWLF1	4	1	0.1%
SWLF2	4	1	0.1%
TOTAL		611	

Weighted-Average Age (Age In Years per MW):

25.84



5

The Event: Wednesday, August 29, 2007

- 12:00 noon Dispatch Operations was notified that Deerhaven 2 was coming off line
- Expected peak load for August 30th
 - was 440 to 470 MWs
 - depending on actual weather

Note: Peak for August 29th was 451 MWs



6

What Do You Do?

- Get the State Ready
 - FRCC Reliability Coordinator
- Find Replacement Power
 - Generation
 - Electric Transmission Capacity
- And/or Increase Natural Gas Supply
 - Volume From Producers
 - Gas pipeline Capacity



7

Notifications: August 29th

- Purchase Request to The Energy Authority
 - 100 MW off peak (12am-7am)
 - 150 MW on peak (7am-11pm)
- Fuels department requested to schedule more natural gas
- FRCC Reliability Coordinator notified (open Hot Line)
- 11:31pm Deerhaven 2 came off line



8

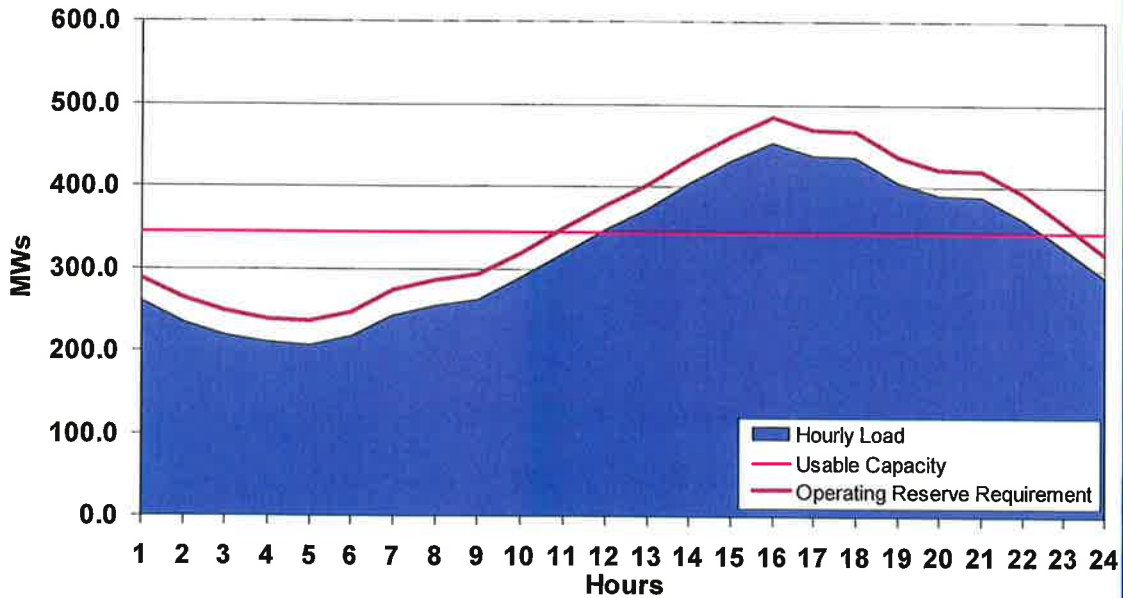
Dispatch Analysis

- Forecasted Need for August 30th
 - NEL 440-470 MWs
 - Total 488-500 MWs (with 28-30 MW operating reserves)
- Installed Peak Capacity
 - 611 MW
 - Over-Pressure Ratings
 - Typical Summer Capacity
- Available Capacity without Deerhaven 2
 - 334 MW
 - Based on Real-Time Plant Assessments
- Potential Shortfall 144 MW-156 MW



9

August 30, 2007 Hourly Load Forecast and Capacity with Deerhaven 2 Off Line



10

Florida's Power Market For August 30th

- Obtained Non-Firm On-Peak Power for next day
 - 158 MW
 - \$231/MWH
 - \$364,980 VS \$47,400 from Deerhaven 2
- Other Non-Firm Power from Hourly Market on economic basis
- **No Firm Transmission Available**



11

What if FRCC Reliability Coordinator had to Curtail Transmission?

- Buy Time – State leans on Operating Reserves
- Option 1 – Seek Emergency Power
 - Only available after all system resources utilized
- Option 2 – Load Shedding
 - All circuits are prioritized
 - As much as required by FRCC Reliability Coordinator



12

Here's What Happened

- Actual August 30th NEL
 - 433.4 MW
 - 461.4 MW with Operating Reserves
- Rain and Weather Reduced Loads over Labor Day (August 31-September 4)
 - \$100-\$126/MW On-Peak Power
 - \$80-\$100/MW Off-Peak Power
 - Firm Transmission Available
- Deerhaven 2 Returned to Service



13

The Energy Authority



14

