



Filing Receipt

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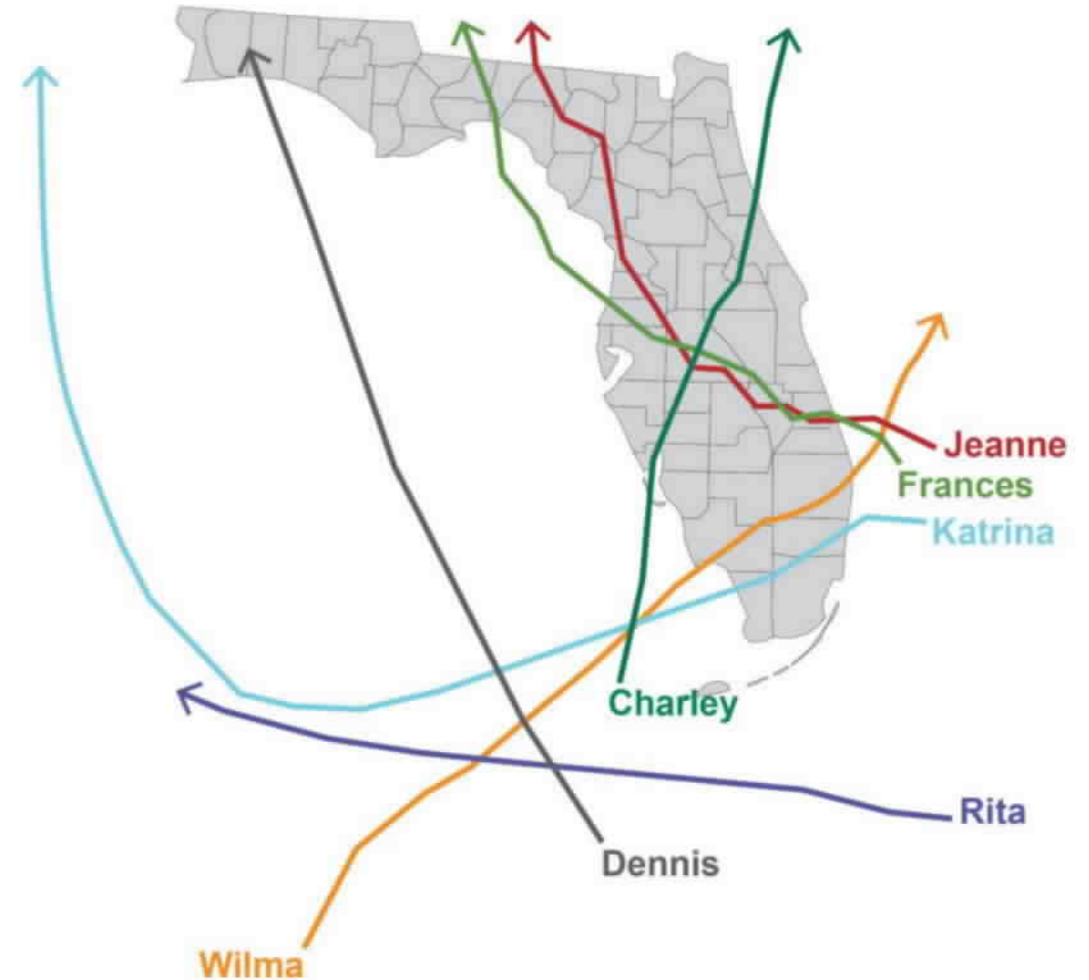
Improving Post-Storm Restoration Through Proactive System Hardening

*An Case Study of
Florida Power and Light*

2004 and 2005 Florida Hurricane Seasons

Seven named storms in two years!

- Hurricane **Charley** (Cat 4, Aug. 13, 2004)
- Hurricane **Frances** (Cat 2, Sep. 4, 2004)
- Hurricane **Jeanne** (Cat 3, Sep. 26, 2004)
- Hurricane **Dennis** (Cat 3, Jul. 10, 2005)
- Hurricane **Katrina** (Cat 1, Aug. 25, 2005)
- Hurricane **Rita** (Cat 1, Sep. 20, 2005)
- Hurricane **Wilma** (Cat 3, Oct. 24, 2005)



Resiliency Efforts

Storm Secure Program (2006-Present)



Storm Follow-Up



Hardening



Pole Inspections



Vegetation Management



Underground Conversions

Enhance System Performance

Storm Comparisons



Pre-Resiliency

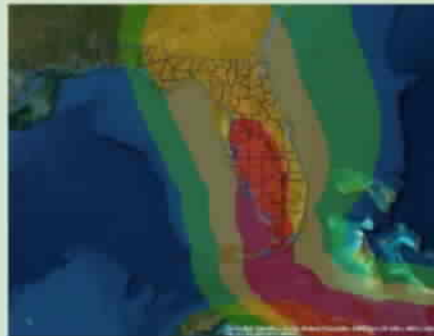
Charley 2004 – 1.9*



Wilma 2005 – 2.8*





Irma 2017 – 4.3*




Ian 2022 – 6.0*



 **Hurricane wind speed**
(74+ miles per hour)

 **Tropical Storm wind speed**
(58-73 miles per hour)

 **Gale force wind speed**
(39-57 miles per hour)

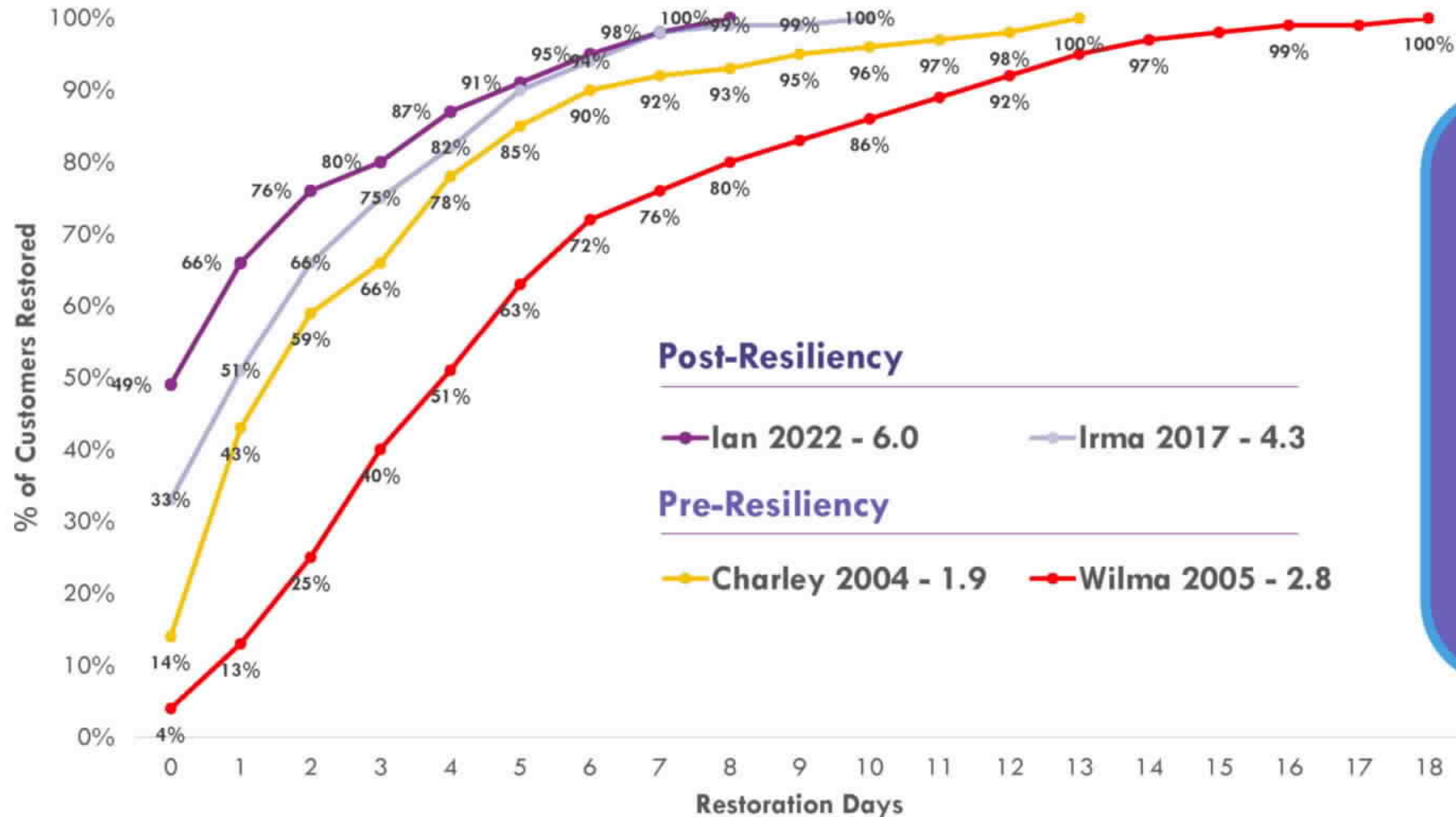
* Please note:

Cyclone Damage Potential Index =
force of wind, radius of wind field,
and duration of winds expected; The
higher the number, the higher the
intensity of the storm.



Post-Resiliency

Hurricane Restoration Performance



Hurricane Ian

66%

Customers restored after
one day

100%

Restored after
eight days

Storm Comparison Results

Performance Metrics	Charley	Wilma	Irma	Ian
Avg. days out per customer	3.5	5.4	2.1	1.5
Days to restore	13	18	10	8
50% of customers restored	3 days	5 days	1 day	1 day
75% of customers restored	5 days	8 days	3 days	2 days
95% of customers restored	10 days	15 days	7 days	6 days
Distribution poles damaged	6,900	12,400	4,700	3,200
Transmission structures failed	75	100	5	0
Smart grid customer interruptions avoided	0	0	546,000	404,000
Days to energize all substations	2 days	5 days	1 day	1 day ⁽¹⁾

⁽¹⁾ One flooded station took four days to restore (fed one industrial customer)