



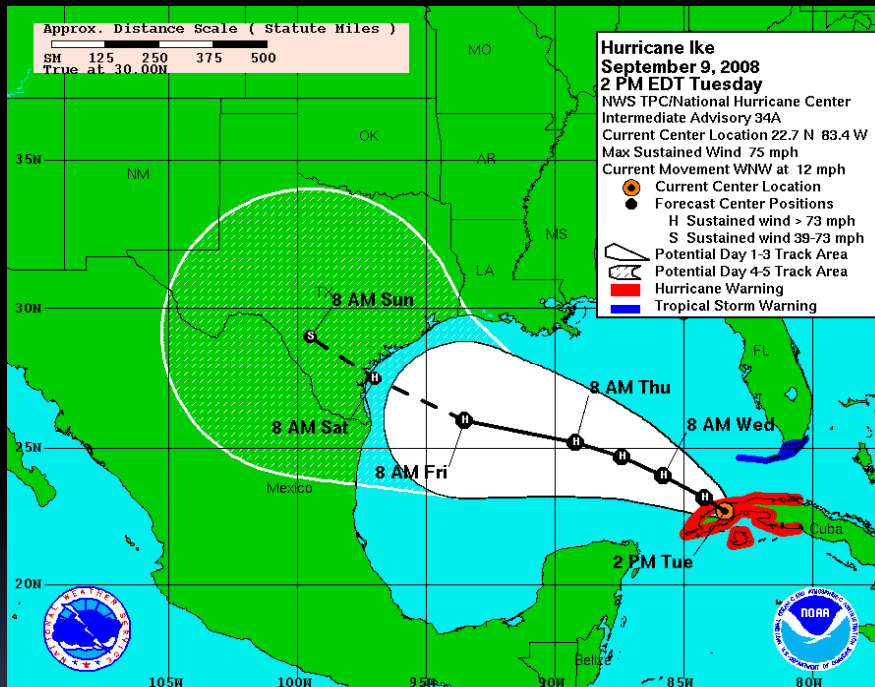
City of Houston
Electricity Reliability Service
For Water Utility

Budget & Fiscal Affairs Committee
Briefing

October 5, 2010

Hurricane Ike

September 9



- Ike makes landfall at Galveston on Saturday, September 13, 2008 at 2:10am.
- Category 2, 110 mph winds.
- Third Most Destructive Hurricane to strike the US
- Damages ~ \$27 billion (\$8 billion in Houston)
- 82 U.S. deaths, 202 missing

Hurricane Ike Timeline

Saturday 9/13/08	<ul style="list-style-type: none">■ Hurricane Ike makes landfall■ Lynchburg and Trinity River Pump Stations lost power■ EWPP&SEWPP lost raw water supply for ~17 hours■ System pressure dropped below 20 psi■ Issued Boil Water Notice■ Power restored at Lynchburg Pump Station
Sunday 9/14/08	<ul style="list-style-type: none">■ EWPP and SEWPP regained raw water supply and resumed production■ Began regulatory sampling
Monday 9/15/08	<ul style="list-style-type: none">■ Continued regulatory sampling■ Trinity River Pump Station regained power
Wednesday 9/17/08	<ul style="list-style-type: none">■ Sampling results concluded the system was safe■ Rescinded Boil Water Notice

Senate Bill 361

- Applies to **Affected Utilities** providing water services in Harris County
- Requires capability for Emergency Operation at 35 psi if an **Extended Power Outage** for more than 24 hours
- Requires Affected Utilities to install and maintain automatically starting auxiliary **Generators** or **Distributive Generation** facilities for each raw water intake pump station, water treatment plant, pump station, and pressure facility necessary to provide water to **Wholesale Customers**

Senate Bill 361 / TCEQ Rules Compliance Timeline

Timeline	State Regulations / Requirements	City Actions / Compliance Milestones
Jun 2009	<ul style="list-style-type: none"> ▪ SB 361 signed (Effective 9/1/2009) 	
Oct 2009	<ul style="list-style-type: none"> ▪ TCEQ Final Rule published 	<ul style="list-style-type: none"> ▪ Identified Critical Water Facilities
Nov 2009		<ul style="list-style-type: none"> ▪ Submitted Critical Water Facilities List
Feb 2010		<ul style="list-style-type: none"> ▪ Documented Emergency Power Requirements ▪ Determined Emergency Generator Locations ▪ Posted RFI
Mar 2010	<ul style="list-style-type: none"> ▪ Emergency Preparedness Plans (EPP) due ▪ TCEQ granted a 90-day extension to COH 	<ul style="list-style-type: none"> ▪ Hired an energy consultant ▪ Conducted interviews

Senate Bill 361 / TCEQ Rules Compliance Timeline (Continued)

Timeline	State Regulations / Requirements	City Actions / Compliance Milestones
May 2010		<ul style="list-style-type: none"> ▪ Published RFP
Jun 2010		<ul style="list-style-type: none"> ▪ Submitted EPP to TCEQ ▪ Interviewed all respondents ▪ Selected finalists
Aug 2010	<ul style="list-style-type: none"> ▪ TCEQ requested additional information on EPP 	<ul style="list-style-type: none"> ▪ Entered final contract negotiation
Sep 2010		<ul style="list-style-type: none"> ▪ Submitted response to TCEQ request for additional information on EPP
Oct 2010	<ul style="list-style-type: none"> ▪ EPP implementation commencement extended to 10/1/2010 	

Implement is defined as “initiating actions required to comply with an approved EPP. EPPs should include a reasonable time frame for completion of implementation. Full compliance date will be determined on a case-by-case basis by the agency. In response to these comments, the commission has revised §290.47(j), Appendix “J” to include a requirement that affected utilities include their proposed timeframe for full implementation of the EPP.”

Drinking Water

SB 361 Compliance Facilities

Facilities	Prior Compliance 30 TAC 290	Action Required by SB 361
East Water Production Plant (EWPP)	Dual Power Feed	Fixed Generator through Electricity Reliability Service Contract
Southeast Water Production Plant (SEWPP)	Dual Power Feed	Fixed Generator through Electricity Reliability Service Contract
Northeast Water Production Plant (NEWPP)	Dual Power Feed	Fixed Generator through Electricity Reliability Service Contract

Backup Power Generation Procurement

Scope of Work (RFP)

- Provide onsite power generation for the three surface water treatment plants
 - Includes purchase, installation, permits, operation and maintenance of units

Evaluation Criteria

- | | |
|-----------------------|-----|
| ■ Technical Viability | 30% |
| ■ Financial Viability | 30% |
| ■ Pricing | 20% |
| ■ Experience | 15% |
| ■ MDBE Participation | 5% |

SB361 RFP Response And Review

- Six Service Providers Submitted an RFP
- Annual Fixed Capacity Payments in Range of \$2.5 - \$11.0M
- Interviewed All Six Service Providers

SB361 Procurement Process Results

- NRG selected as the respondent with the best value
- Negotiated 20-year contract with two 5-year extensions
- NRG signed Letter of Intent

Next Steps

- Contract to be signed by NRG on October 13, 2010
- Submit RCA to full Council on October 27, 2010

NRG Contract Cost and Budget Impacts

Plant Location		Annual Costs Years 1-5	Annual Costs Years 6-10	Annual Costs Years 11-15	Annual Costs Years 16-20
PUD Water Plants (fixed)		\$2,850,000	\$2,250,000	\$1,950,000	\$1,650,000
Fuel (annual testing)		25,000	25,750	26,500	27,500
PUD Costs		\$2,875,000	\$2,275,750	\$1,976,500	\$1,677,500
Estimated City 20-year Contract Cost		\$44.3M			
Estimated CWA 20-year Contract Cost		\$35.9M			
PWE Total Costs		\$80.2M			

Note:

- ❑ The City's 20 year contract includes Option for NEWPP expansion – fixed cost in contract per additional MW
- ❑ Annual inflation rate: 3% in Fuel cost calculations

Public Utilities Budget Impact

Current Electricity Budget for Three Water Plants

\$13.7M / yr.

NRG Contract Costs (years 1-5)

\$3.0M / yr.

Electricity Total (22% increase)

\$16.7M / yr.

CWA Electricity Budget for Pump Stations

\$8.0M / yr.

NRG Contract Costs (years 1-5)

\$2.5M / yr.

Electricity Total (27% increase)

\$10.2M / yr.

Combined Utility System Electricity Budget (7.3% increase)

\$5.2M / yr.

*Note: \$5.5M increased CUS Total Budget by 1.8%.
Potable water cost increased by 4.3 cents / 1,000 gallons*



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