



Securitization:

A Case Study in Ratepayer Benefits

NARUC Accounting and Finance Meeting, March 7, 2016

Victor Prep, P.E.

Byron S. Watson, CFA

Energy & Resource Consulting Group, LLC

Denver, Colorado

www.ergconsulting.com

Introduction

- Victor Prep, P.E. – Executive Consultant
 - BSME from OU, MBA from Univ. of PA, Wharton
 - Registered P.E. in CO, LA, and PA, and Certified Energy Manager
 - Retired Nuclear Submarine Naval Officer
- Byron S. Watson, CFA, CRRA – Senior Consultant
 - BSEE from SMU, MBA from Emory University
- Members of the Firm act as Advisors to the Council of the City of New Orleans. Our services as Advisors are in Certain Ways Comparable to Those of a Commission's Staff

Introduction

- New Orleans's Geography Exposes it to a High Risk of Electric Service Disruption due to Severe Storms such as Hurricanes Katrina, Rita, Gustav, Ike, and Isaac
- Following a Storm-Related Service Disruption, Immediate System Restoration is Essential for Public Safety. Related Costs can Strain a Utility's Liquidity
- Securitization can Provide Ratepayer Savings and Public Benefits by
 - Reducing the Carrying Costs (i.e., Interest or Rate of Return) Related to the Recovery of Storm Costs
 - Economically pre-Funding a Storm Reserve Escrow Account

Introduction

○ Case Study Overview

- In 2012, Hurricane Isaac Struck The Gulf Coast, Causing an Estimated \$2.39 Billion In Total Damages
- Entergy New Orleans's ("ENO") Electric System Restoration Costs Following Isaac Totaled \$47.3 Million
 - \$17.4 Million in O&M Costs (E.G., Removal Of Fallen Trees, etc.)
 - \$29.9 Million in Capital Costs Such As Replacement Of Plant
- ENO has 169,856 Retail Electric Customers
- ENO Issued a Securitization Bond Series, Principal Totaling \$99 Million. Use of Funds:
 - Recover ENO's Isaac Costs
 - Prefund a Storm Reserve Whose Ultimate Balance Totals \$75 Million (A Target Amount Originally set Following Hurricane Katrina)
 - Pay for Bond Issuance Costs

**I. CUSTOMARY COST RECOVERY
VS.
SECURITIZATION**

Cost Recovery - Customary

- Customarily, Utility Cost Recovery is as a Normal Addition to Rate Base or as a Regulatory Asset
- Capital Costs
 - Record in Rate Base
 - Recover Costs Beginning with Next Rate Action or Through Interim Cost Recovery Rider Pending Next Rate Action
- Operation & Maintenance (O&M) Costs
 - Defer O&M Costs
 - Amortize Over a Period of Time (e.g., 10 Years)
 - Carrying Cost on Unamortized Balance (e.g., WACC or a Supportable Short-term Rate)
 - Recover Costs (i.e., Amortization and Carrying Costs) Through Rider or Wait Until Next Rate Action and Recover Levelized Costs as Part of Base Rates

Cost Recovery - Securitization

- Utility Receives net Proceeds of Securitization Bond Issuance
 - Customary Recovery Costs (i.e., Carrying Costs, Interest Accrual, Depreciation/Amortization Etc.) are Replaced with The Interest on The Securitization Bonds and Amortization of Securitization Bonds' Issuance Costs
 - Customary Recovery Involves Credits to Rate Base Related to Deferred Taxes (i.e., tax Normalization), While Securitization Does not Typically Provide for Such Benefits (Alternate Structures Discussed Later)
- Rate Base is not Increased due to System Restoration Costs, as They are Fully Recovered Upon Securitization
- Most Commonly, a Long-Term-Debt Liability Equal to Bond Principal is Placed on the Utility's *Consolidated* Balance Sheet
 - Such a Liability Does not Affect Utility's Credit Rating (Rating Agencies Reconsolidate Without Securitization Debt)

Advantages - Ratepayers

- Customary Recovery is Based on an Allowed ROE and WACC
 - ENO's Last Approved ROE is 11.1%, and 12/31/15 Pre-Tax WACC is 11.43%
 - Recovery of Deferred O&M Costs Over ~ 10 Years (set by Commission)
 - Recovery of Capital Costs Over Useful Life (e.g., 10-25 Years)
- Securitization Offers Overall Ratepayer NPV Savings
 - Typically, Securitization Bond Yields Reflect top Credit Ratings (i.e., low Yields)
 - Because Maturity of Bond is Shorter Than Some Capital Assets (e.g., 10 Yr vs. 20 Yr), Securitization can Increase Rates Initially Compared to Customary Recovery of Capital Costs (i.e., Securitization Interest Cost is Lower, but Principal Amortization Cost is Higher)
 - Commissions Must Weigh Overall Savings Against Front-Loading of Recovery

Advantages - Utility

- A Utility May Earn its Approved ROE on its Capital Investment
 - Securitization of Capital Costs Prevents Such an Opportunity
- Utility Nonetheless can Benefit From Securitization
 - Immediate Source of Liquidity (a High Priority for Case Study Utility)
 - Securitization Debt Does not Harm a Utility's Credit Rating
 - Securitization Bonds are not Factored Into WACC Calculations in our Experience
 - Effect is A Higher WACC due to Otherwise Higher Equity Mix, as Customary Recovery may Involve the Issuance of new Debt, Which Tends to Lower WACC Values
 - Timely Recovery of Unexpected Costs may be Generally Constructive to a Utility's Financial Stability and Ability to Attract Capital
 - Utility may Recover Storm Costs Without Being Subject to a Fully-allocated Rate Case
- The Three Entergy Operating Companies we have Reviewed have Exhibited a Notably Cooperative Attitude Toward Securitization

II. SECURITIZATION LAWS

Securitization Laws

- Roughly Half of US States Have Laws Enabling Utility Securitization
 - All Five Entergy Operating Companies Have Securitization Bonds Outstanding
- Typical Features of Securitization Laws / Bonds
 - Non-bypassable – Creation of a *Securitization Property Right*, a Right to Recover Debt Service Funds From all Ratepayers Regardless of Their Utility Provider or Power Source
 - True Sale – Securitization Property is Sold to the Entity That Issues the Bond
 - Utility's Receipt of Issuance Proceeds Becomes Taxable Revenue (Usually)
 - Pledge of State (Local) Government – Pledge to not Attempt to Block the Collection of Funds Required to Service the Bond Debt (i.e., Repeal the Enabling Law)
 - Bankruptcy Remote – Even if The Utility, or the Related Government Defaults on Debt, the Collection of Debt Service Funds may Continue (i.e., Property Right is Indefeasible)
 - Bonds Are not Guaranteed by Either the Utility or any Government
 - Highest Credit Rating – all Securitization Bonds we Have Reviewed Received a AAA/Aaa (i.e., Highest) Rating Except our Case Study Bonds

Securitization Laws

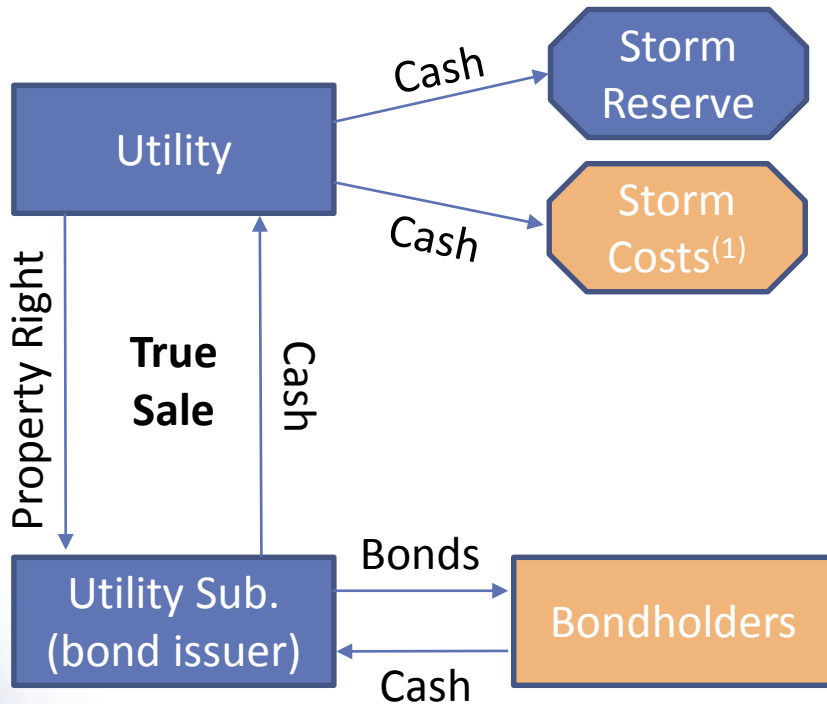
- Louisiana has Three Securitization Laws That Apply to Utilities
 - Act 64 (La. R.S. 45: 1226-1236, 2006)
 - All the Typical Characteristics Identified on The Prior Page
 - Special Purpose Entity Issues Bonds - a Wholly-owned Utility Subsidiary
 - Proceeds may be Used to Pay for Storm Costs (Capital and O&M) and to Prefund Storm Reserves
 - Outstanding Bond Principal Reported on Utility's Consolidated Balance Sheet
 - Act 988 (La. R.S. 45: 1251-1261, 2010) – Investment Recovery Bonds
 - Similar to Act 64, Except Intended for
 - The Retirement of Stranded Assets (i.e., Failed Generating Unit Projects)
 - Capital Expenditures Exceeding \$350 Million

Securitization Laws (cont.)

- Act 55 (La. R.S. 45: 1311-1328, 2007)
 - Utility Subsidiary Does not Issue the Bonds. Bonds are Issued By a State Political Subdivision Corporation Whose Sole Purpose is to Issue Act 55 Securitization Bonds
 - Outstanding Bond Principal is not Recorded as a Liability on the Utility's Consolidated Balance Sheet
 - Issuance Costs About \$1 Million More Than Under Acts 64 Or 988
 - **Significant Tax Advantage (Roughly = Capital Costs * Tax Rate)**
 - Utility Receives Issuance Proceeds to Recover Capital Costs as a non-Shareholder Capital Contribution (see Following Chart)
 - Effectively Means Utility Records and Depreciates new Plant but Does not Record Revenues Related to Recovery of Capital Costs
 - Utility Receives Issuance Proceeds to Recovery O&M Costs as Taxable Revenues
 - First Employed in 2007, the IRS has not Disallowed the Above Treatment of Capital Costs. However, Entergy has Cautioned That the IRS Could Review Such Treatment, and its Approval is not Guaranteed

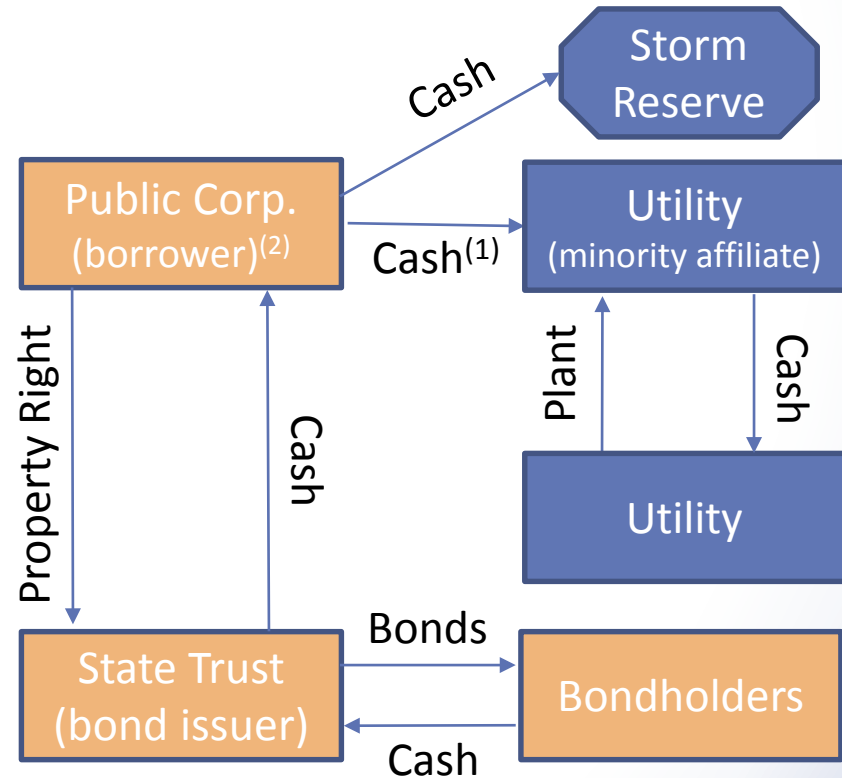
Alternate Structure

Typical Flow of Funds



¹ Repayment of Storm-Related Debts

Alternate (i.e., Act 55) Flow of Funds



¹ Non-Shareholder Capital Contribution

² Property Right is Created in Public Corp.

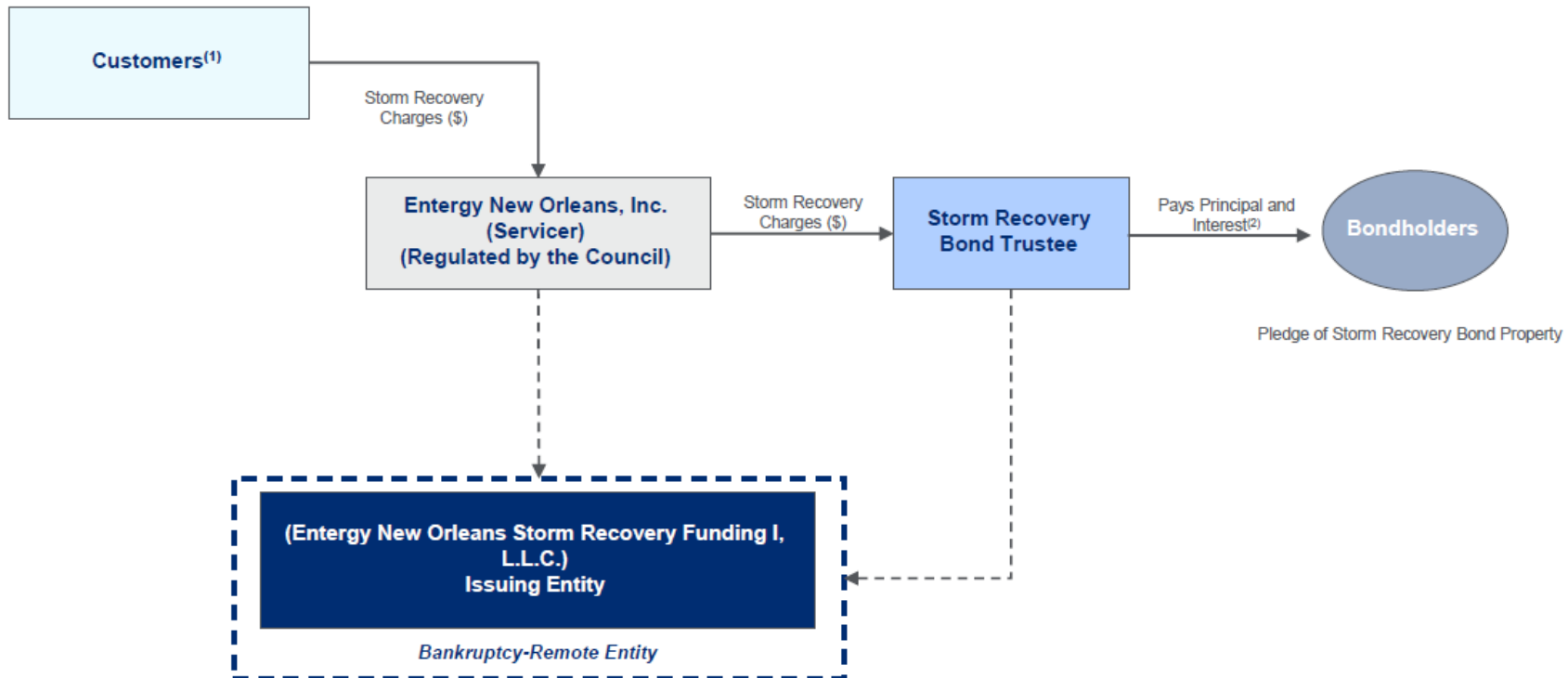
**III. CASE STUDY:
ENO'S SECURITIZATION OF HURRICANE ISAAC
COSTS AND PREFUND A STORM RESERVE**

Split Credit Rating

- ENO's 2015 Securitization Bonds Were Rated by two Agencies
 - Standard & Poor's: 'AAA' – S&P's Highest Rating
 - Moody's Investors Service: 'Aa1' – Moody's Next-to-Highest Rating
- Every Other Securitization Bond we Reviewed Received the Highest Rating From the Reviewing Agencies
- Causes of ENO's Bonds' Split Ratings
 - Hurricane Katrina Demonstrated that New Orleans is Vulnerable to Lengthy Service Outages
 - Risk is to the System – ENO's Bankruptcy is not the Issue
- ENO Offered to Over-collateralize the Bonds to Achieve a 'Aaa' Rating From Moody's, but Such Efforts Were Unsuccessful
- Eventual Coupon Rate of ENO's Bond was 2.67%, 30-50 bp Higher Than was Expected With a AAA/Aaa Rating

Bond Repayment Structure

- Case Study Debt Service Flow of Funds



¹ Customers are any electric consumers in utility's service area (non-bypassable)

Bond Repayment Riders

- Two new Riders Were Added to Eno's Rate Schedule
 - Securitized Storm Cost Recovery (SSCR)
 - Collects Funds for Debt Service as a Percent of Base Rates (Currently 3.7175%)
 - Calculated so That Actual Cash Collections (not Billings) are Sufficient to pay Bond Administrative Costs and Make Timely Principal and Interest Payments
 - Requires Assumptions as to Timing of Collections and Demand
 - Securitized Storm Cost Offset (SSCO)
 - Credits Bills as a Percent of Base Rates (Currently -0.1638%)
 - Recognizes Revenue Requirement Effect of ADIT Related to Capital Investments Paid with Securitization Proceeds and Also Storm-related Casualty Loss Deductions.
- Typical Bill Impact (1,000 Kwh/Mo Residential, Feb 2016 Billing Cycle)
 - SSCR: \$2.44
 - SSCO: \$(0.11)

Tombstone

- Details from ENO's *Issuance Advice Letter* Regarding Securitization Bonds
 - Bonds Name: Storm Recovery Bond Series: 2015
 - Issuer: Entergy New Orleans Storm Recovery Funding I, L.L.C.
 - Close Date: July 22, 2015
 - Principal: \$98,730,000
 - Coupon: 2.670%
 - Tenor of Bonds: 8.9 Years (Final Scheduled Maturity Date)
 - Initial Collateralization (i.e., Capital Subaccount): \$2.9 Million
 - Issuance Costs: \$2.9 Million
 - Annual Ongoing Financing Costs: \$495,000

Ratepayer Benefits

- Use of Proceeds
 - \$32 Million of the \$99 Million Bond Principal Recovered Hurricane Isaac Costs
 - Ratepayer Benefit: \$24.8 Million In Savings (PV), Securitization vs. Customary Recovery – Related To Recovery of Capital Storm Costs
 - \$64 Million of the \$99 Million Bond Principal Pre-funded a Storm Reserve
 - Ratepayer Benefits: \$2 Million in Savings (PV), Securitization vs. City of New Orleans's Borrowing Costs (for Comparison Purposes Only)

IV. OBSERVATIONS

Considerations for Regulators

- Is Alternate Structure (i.e., Avoiding Taxable Revenue Related to Capital Storm Costs) Overall Beneficial?
 - Cost to Draft and Enact Enabling Legislation if not Already in Place
 - Extra Issuance Costs (About \$1 Million) Compared to Standard Securitization
 - Alternate Structure Takes About Three Months Longer to Issue Bonds
 - Possibility of Legal / IRS Scrutiny
 - Benefits of Alternate Structure are Substantial, but Only to the Extent Bond Proceeds are Used to Recover Capital Costs
 - Alternate Structure Likely Would not Result in net Benefits When Used to Recover Asset Retirement or Stranded Asset Costs (Because Fair Value of Retired or Stranded Assets Would Likely be far Less Than Undepreciated Asset Book Cost)

Considerations for Regulators

- Does Securitization Constitute Single-issue Ratemaking?
 - Securitization can Isolate Costs from a Fully-Allocated Rate Case and Creates a Separate Recovery Mechanism
- Should Today's Ratepayers pay for Future Benefits?
 - Prefunded Storm Reserves Require Today's Ratepayers to Pay for Tomorrow's Storm Costs
 - Securitizing Capital Costs Requires Recovering Over 10 Years Costs Related to Plant with 20+ Year Lives
- Does Securitization Materially Reduce a Utility's Risk and Therefore Tend to Reduce Required Allowed ROE?
 - Utility is not Responsible for Payment of Debt Related to Securitized Capital Costs
 - Prefunded Storm Reserves Reduce Risk to Utility's Cash Flow in the Event of a Major Storm