

# Derivatives Use Report

- Summary
- Dashboard

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July 31, 2017

Prepared By Enterprise Risk Management

**Introduction**

As determined by the University of Illinois System (the System) Derivatives Use Policy (The Policy) which was approved by the Board of Trustees in July 2010 and updated November 2014, the System's exposure to an individual counterparty is measured by the Net Termination Exposure (NTE). The Prairieland Energy, Inc. (PEI) Board of Directors approved a PEI-specific derivatives use policy at their October 20, 2014 meeting (The PEI Policy). The PEI Policy is similar to the System policy, but also provides requirements for physical delivery transactions (which apply to the PEI forward purchase contracts). This report provides information on the System's financial position and potential obligations should there be an early termination of any or all of its existing financial and physical derivative transactions, including positions held by PEI. This is a snapshot of counterparty exposure, only as it relates to derivatives.

**Counterparty Financial Health**

The Policy requires regular due diligence reviews of the financial strength of System/PEI counterparties. It is the responsibility of the departments that originate each hedging transaction to review the related counterparties regularly in compliance with §12 of the Policy.

Bond credit ratings are used as a proxy for counterparty financial strength. The Policy requires an A-/A3 rating to qualify as a counterparty. The financial institutions JPMorgan Chase Bank, Morgan Stanley, and Deutsche Bank (credit support provider for Loop Financial Products) all meet this requirement. Morgan Stanley and Deutsche Bank's split ratings of BBB+/A3 and A-/Baa2 respectively only meet the qualification with one rating agency. The Capital Financing office should continue to monitor the financial condition and outlook of their counterparties.

The PEI Policy requires an A-/A3 rating to qualify for OTC financial transactions and a BBB-/Baa3 or BB+/Ba1 with LOC for physical delivery transactions. The energy companies all meet the PEI Policy qualifying credit rating for physical delivery transactions. TransAlta however has a split rating of BBB-/Ba1. Rail Splitter is not rated and therefore provided a \$2.5 million LOC from HSBC Bank which is rated AA-/Aa2 (previous LOC with Comerica Bank ended). EDF is not rated by S&P but is rated Baa2 by Moody's. FC Stone is not rated, but the futures transaction is an exchange traded derivative with InterContinental Exchange (ICE), therefore, per the PEI Policy, the use of a nationally recognized exchange is sufficient to demonstrate the counterparty's qualifications. ICE is rated A/A2. PEI should continue to monitor the financial condition and outlook of their counterparties.

**System Total NTE**

The combined current notional value of these derivative agreements is \$91.70 million. Should there be immediate termination of all agreements, the combined NTE for all outstanding agreements is a negative \$8.30 million, unfavorable to the System. The overall immediate risk of termination is low since the counterparties have no ability to terminate these transactions unilaterally unless certain triggers are met (see Financial Hedging NTE - Interest Rate Swaps).

**Financial Hedging NTE (Interest Rate Swaps)**

The aggregate mark-to-market value or total NTE of all interest rate swaps is a negative \$5.58 million, which would be a liability of the System to each of the swap counterparties if the swaps were terminated. The immediate risk of all swaps terminating is low since the counterparties cannot unilaterally terminate these contracts unless certain triggers are met, including: (i) a University of Illinois System default, or (ii) the long-term rating on the System's bonds is withdrawn, suspended or reduced below BBB+/Baa1 on the UIC SC 2008 and reduced below BBB/Baa2 on the HSFS 2008 bonds.

On July 24, 2017 Standard & Poor's affirmed the University System's AFS, COPs, and South Campus bond ratings as A-. S&P also downgraded the University System's HSFS bond rating to A- from A. They removed the University System from its credit watch and set the outlook as stable for all ratings.

On July 12th, S&P affirmed the state's general obligation rating of BBB-, removed the state from credit watch, and changed the outlook on state GO Bonds to stable from negative. Moody's placed the state under review for possible downgrade on July 5th after failing to pass a budget, however, after the budget was passed, Moody's released a report on July 20th confirming the state GO Bond rating at Baa3 with negative outlook.

## Hedging Summary

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All University of Illinois System bond ratings and the State of Illinois are listed below.

<b>System</b>	<b>Moody's</b>	<b>Outlook</b>	<b>S&amp;P</b>	<b>Outlook</b>
AFS	A1	Negative	A-	Stable
COPs	A1	Negative	A-	Stable
UIC South Campus	A2	Negative	A-	Stable
HSFS	Baa1	Negative	A-	Stable
State of IL GO	Baa3	Negative	BBB-	Stable

### **Financial Hedging NTE (Futures - Energy Commodity Transactions, Financially Settled)**

The total NTE of all PEI futures contracts is a negative \$0.17 million, unfavorable to PEI/the System. If all of the agreements were terminated PEI would have an obligation to FC Stone.

### **Physical Hedging NTE (Forward Purchases - Energy Commodity Transactions, Physical Delivery)**

The total NTE of all physical energy hedges is a negative \$2.55 million, unfavorable to PEI/the System. If all of the agreements were terminated PEI would have an obligation to BP, EDF Energy, Exelon, TransAlta, Shell, and Railsplitter of \$0.27 million, \$0.07 million, \$0.06 million, \$0.01 million, \$0.20 million, and \$1.94 million respectively.

### **Counterparty Concentration**

Current notional/contract values with all counterparties are below The Policy limit.

### **Material Events<sup>1</sup>**

On July 24, 2017 Standard & Poor's affirmed the University System's AFS, COPs, and South Campus bond ratings as A-. S&P also downgraded the University System's HSFS bond rating to A- from A. They removed the University System from its credit watch and set the outlook as stable for all ratings.

Purchased natural gas forward contracts from BP totaling \$431,900 for FY18 and natural gas futures contracts from FC Stone totaling \$434,400 for FY19-20.

### **Summary of Collateral Posted by the System (Thresholds)**

With respect to the System, the threshold requirement in all of the interest rate swap agreements is infinite, which means the University of Illinois System is never required to post collateral. Threshold requirements are not addressed in the energy forward purchases contracts, except for Shell and TransAlta which are \$10 million each, the same as the System guarantee. Margin exposure with INTL FC Stone Financial is \$103,925.

The System does provide guaranty agreements to PEI's energy commodity vendors including \$10 million each with Shell, TransAlta, and BP Canada Energy Marketing Corp., \$5 million with Exelon, \$2.5 million to Rail Splitter, and \$3 million to EDF. Although PEI's position with Sequent and NRG both ended 6/30/16, the University still provides a guarantee of \$12.5 million and \$1.25 million respectively. PEI is in the process of notifying Sequent to cancel the guaranty. The University System guarantee to NRG was left open so the vendor can be included in PEI's electric RFP's.

The System also provided a \$2 million guarantee to PJM Interconnection for physical procurement at UIC and a \$1 million guarantee to MISO for physical procurement at UIUC but both are unrelated to physical or financial hedging.

**Summary of Collateral Held by the System (Thresholds)**

The collateral requirements for counterparties on the interest rate swaps are more risk tolerant than The Policy (see table below). All of the swap agreements were approved by the Board of Trustees and executed prior to The Policy, so this is noted as a predated-exception on the Dashboard report.

The contracts with Exelon, BP, Rail Splitter, and EDF do not address collateral thresholds with bond rating triggers. Exelon, BP, and EDF provide recourse through Credit or Adequate Assurances provisions if reasonable grounds exist regarding unsatisfactory creditworthiness or performance. It is incumbent upon PEI to request Performance Assurance if a rating change triggers the Policy collateral requirements. This provision allows PEI to be proactive, and not necessarily wait for a downgrade event before requesting Performance Assurance. Rail Splitter has provided a \$2.5 million LOC from HSBC Bank. The Shell and TransAlta contracts provide bond rating triggered collateral thresholds in line with The PEI Policy, however, not to exceed the parental company guarantee.

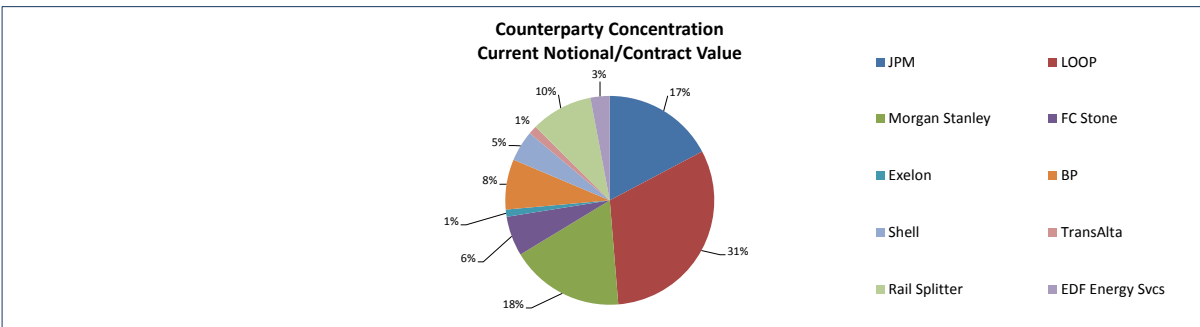
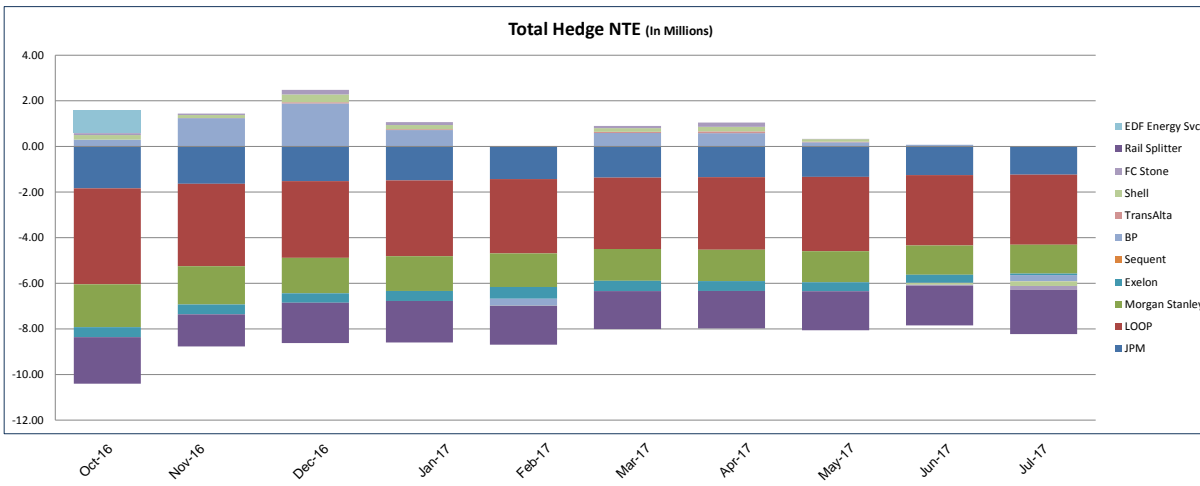
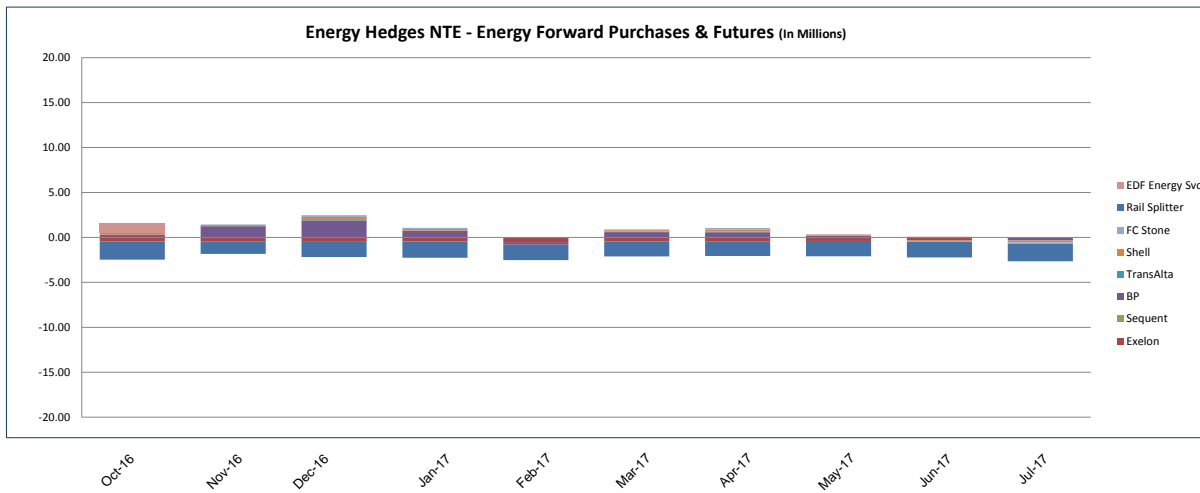
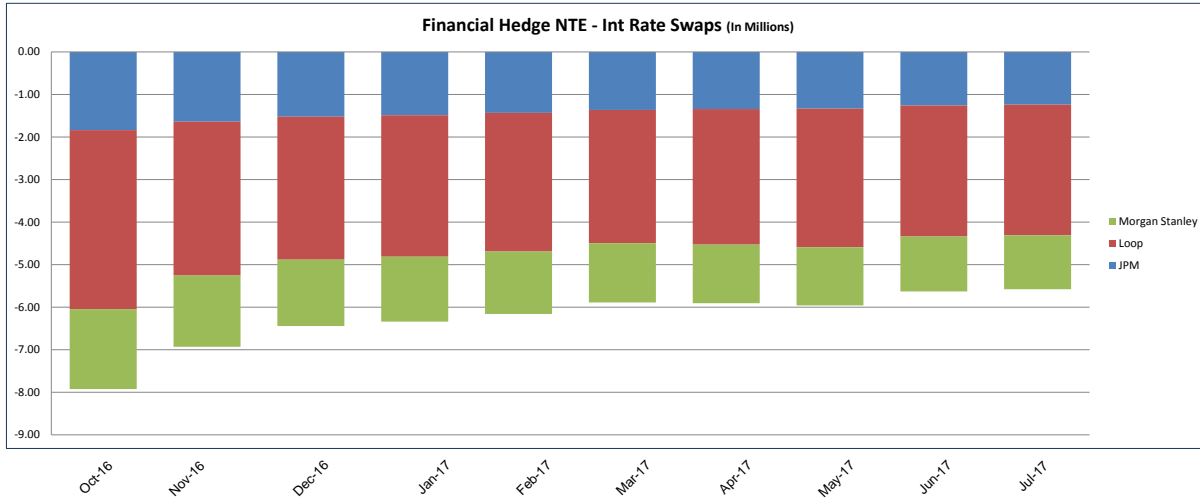
**Collateral Requirements of Counterparties / Thresholds**

Counterparty Credit Rating S&P / Moody's	The Policy	The PEI Policy	Interest Rate Swaps	
	Maximum NTE - Net of Collateral FINANCIAL	Maximum NTE - Net of Collateral PHYSICAL	Counterparty Credit Rating S&P / Moody's	Maximum NTE - Net of Collateral
AAA / Aaa Category	\$35 million	\$35 million	A / A2 and above	Infinite
AA / Aa Category	\$30 million	\$30 million	A- / A3	\$10 million
A / A Category	\$20 million	\$20 million	BBB+ / Baa1 or Below	\$0 million
BBB+ / Baa1 or Below	\$0 million	NA		
//////	//////	//////		
BBB/Baa Category		\$10 million		
BB+/Ba1 or Below		\$0 million		

<sup>1</sup>Items reflected in the Material Events section relate to the Policy requirements and may not conform to material events for financial reporting.

# Hedging Position Dashboard

July 31, 2017



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Org	Responsible Unit	Counterparty	Rated Entity/ Exchange	Bond Rating (S&P / Moody's)	Derivative Type	Expires	Underlying Asset / Liability	Orig Contract (in Millions)	Current Notional / Contract (in Millions)	Market Value (in Millions)	*MTM or NTE (in Mill)	System Guarantee Limit (in Mill)	Counterparty Threshold	
<b>Financial Hedges</b>														
<b>(Interest Rate Swaps):</b> <span style="float: right;">Qualifying Rating A- / A3</span>														
System	Capital Financing	Morgan Stanley Capital Services, Inc.	Morgan Stanley	BBB+ / A3	Int Rate Swap	1/15/2022	UIC SC 2008	\$ 27.40	16.16		(1.27)		Predated Exception	
System	Capital Financing	JP Morgan Chase Bank, N.A.	JP Morgan Chase Bank, N.A.	A+ / Aa3	Int Rate Swap	1/15/2022	UIC SC 2008	\$ 26.85	15.83		(1.24)		Predated Exception	
System	Capital Financing	Loop Financial Products, I, LLC	Deutsche Bank AG (CSP)	A- / Baa2	Int Rate Swap	10/1/2026	HSFS 2008	\$ 40.88	28.83		(3.07)		Predated Exception	
								<b>SUBTOTAL SWAPS</b>	<b>\$ 95.13</b>	<b>60.82</b>		<b>(5.58)</b>		
<b>(PEI Futures Contracts):</b>														
PEI	Utilities Admin	INTL FCStone Financial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2018	Nat Gas Mult FY2018	\$ 0.91	0.87	0.88	0.01			
PEI	Utilities Admin	INTL FCStone Financial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2019	Nat Gas Mult FY2019	\$ 2.93	2.93	2.86	(0.07)			
PEI	Utilities Admin	INTL FCStone Financial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2020	Nat Gas Mult FY2020	\$ 1.48	1.48	1.41	(0.07)			
PEI	Utilities Admin	INTL FCStone Financial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2021	Nat Gas Mult FY2021	\$ 0.36	0.36	0.32	(0.04)			
								<b>SUBTOTAL Futures</b>	<b>\$ 5.68</b>	<b>5.64</b>	<b>5.47</b>	<b>(0.17)</b>		
								<b>SUBTOTAL FINANCIAL</b>	<b>\$ 100.81</b>	<b>66.46</b>		<b>(5.75)</b>		
<b>Physical Hedges</b>														
<b>(PEI Energy Forward Purchases):</b> <span style="float: right;">Qualifying Rating BBB-/Baa3 or BB+/Ba1 with LOC</span>														
PEI	Utilities Admin	BP Canada Energy Marketing Corp.	BP Corporation North America, Inc. (PCG)	A- / A2	Forward Purchase	6/30/2018	Natural Gas Mult FY18	\$ 7.69	7.13	6.86	(0.27)	10.00	Adequate Assurance	
								<b>SUBTOTAL BP</b>	<b>\$ 7.69</b>	<b>7.13</b>	<b>6.86</b>	<b>(0.27)</b>		
PEI	Utilities Admin	EDF Energy Services, LLC	EDF Trading Limited (PCG)	NR / Baa2	Forward Purchase	6/30/2019	Nat Gas Mult FY2019	\$ 2.73	2.73	2.66	(0.07)	3.00	Adequate Assurance	
								<b>SUBTOTAL EDF</b>	<b>\$ 2.73</b>	<b>2.73</b>	<b>2.66</b>	<b>(0.07)</b>		
PEI	Utilities Admin	Exelon Generation Company LLC	Exelon Generation Company LLC	BBB / Baa2	Forward Purchase	6/30/2018	Electricity Mult FY18	\$ 0.66	0.58	0.55				
PEI	Utilities Admin	Exelon Generation Company LLC	Exelon Generation Company LLC	BBB / Baa2	Forward Purchase	6/30/2019	Electricity Mult FY19	\$ 0.44	0.44	0.41				
								<b>SUBTOTAL Exelon</b>	<b>\$ 1.10</b>	<b>1.02</b>	<b>0.96</b>	<b>(0.06)</b>	<b>5.00</b>	Credit Assurance
PEI	Utilities Admin	TransAlta Energy Marketing (US) Inc.	TransAlta Corp (PCG)	BBB- / Ba1	Forward Purchase	6/30/2018	Electricity Mult FY18	\$ 0.99	0.79	0.79				
PEI	Utilities Admin	TransAlta Energy Marketing (US) Inc.	TransAlta Corp (PCG)	BBB- / Ba1	Forward Purchase	6/30/2019	Electricity Mult FY19	\$ 0.41	0.41	0.40				
								<b>SUBTOTAL TransAlta</b>	<b>\$ 1.40</b>	<b>1.20</b>	<b>1.19</b>	<b>(0.01)</b>	<b>10.00</b>	Rating Triggers
PEI	Utilities Admin	Shell Energy North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A3	Forward Purchase	6/30/2018	Electricity Mult FY18	\$ 3.89	3.29	3.12				
PEI	Utilities Admin	Shell Energy North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A3	Forward Purchase	6/30/2019	Electricity Mult FY19	\$ 1.06	1.06	1.04				
PEI	Utilities Admin	Shell Energy North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A3	Forward Purchase	6/30/2020	Electricity Mult FY20	\$ 0.01	0.01	0.00				
								<b>SUBTOTAL Shell</b>	<b>\$ 4.96</b>	<b>4.36</b>	<b>4.16</b>	<b>(0.20)</b>	<b>10.00</b>	Rating Triggers
<b>(PEI Renewables):</b>														
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2018	Electricity Mult FY18	\$ 0.96	0.92					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2019	Electricity Mult FY19	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2020	Electricity Mult FY20	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2021	Electricity Mult FY21	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2022	Electricity Mult FY22	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2023	Electricity Mult FY23	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2024	Electricity Mult FY24	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2025	Electricity Mult FY25	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2026	Electricity Mult FY26	\$ 0.96	0.96					
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa2	Forward Purchase	6/30/2027	Electricity Mult FY27	\$ 0.20	0.20					
								<b>SUBTOTAL Renewables</b>	<b>\$ 8.84</b>	<b>8.80</b>	<b>6.86</b>	<b>(1.94)</b>	<b>2.50</b>	<b>LOC</b>
								<b>SUBTOTAL PHYSICALS</b>	<b>\$ 26.72</b>	<b>25.24</b>	<b>22.69</b>	<b>(2.55)</b>		
<b>Grand Total</b>								<b>GRAND TOTAL</b>	<b>\$ 127.53</b>	<b>91.70</b>		<b>(8.30)</b>		

\*Negative termination value means the System or PEI is obligated to the counterparty (transaction is "underwater").

CSP - Credit Support Provider  
LOC - Letter of Credit provided

PCG - Parental Company Guarantee provided  
WR - Withdrawn Rating