

Capital/Revenue Investment Proposal – Summary
**APPLICATION BY NIAGARA MOHAWK POWER CORPORATION TO SANCTION
THE CONTRACT TO ACQUIRE LUTHER FOREST STATION
AND FOUR NEW 115kV TRANSMISSION LINES
FROM LUTHER FOREST TECHNOLOGY CAMPUS ECONOMIC DEVELOPMENT CORP.
Transmission, NMPC, Project No. N/A**

(A sanction paper by Bill Malee and sponsored by Mary Ellen Paravalos – August 17, 2010)

Description

Luther Forest Technology Campus Economic Development Corp. (LFTCEDC) in conjunction with the State of New York has developed and constructed the Luther Forest Technology Campus in Saratoga County, NY for new nanotechnology manufacturing facilities. Included in the development of the technology park is the design and construction of a new 115kV breaker and a half switching station (Luther Forest station) and four new 115kV transmission lines. Luther Forest station will be tied into the National Grid network via two transmission lines to the west into Malta station and two transmission lines to the east into Mulberry station. The station and lines have been designed and constructed to meet redundancy levels required by the nanotechnology manufacturing factories such as Global Foundries Inc. (GF). GF is currently constructing a semi-conductor chip manufacturing facility within the Luther Forest Technology Campus site, with an expected load of +70MW. The fair market value of the assets being constructed by LFTCEDC is estimated at \$37m, which is based on the known engineering and construction costs incurred by LFTCEDC to date. National Grid under an Engineering, Permitting, & Construction Services Agreement being funded by LFTCEDC, has been reviewing per our standards, the design and construction of the station and transmission lines in anticipation of acquiring these facilities from LFTC after completion.

Approval is being requested to enter into a Purchase and Sale Agreement to acquire the 115kV substation and four 115kV Transmission lines for \$1.00 and take on the \$14.8m income tax obligation triggered by the transfer of the assets at a price below their market value. The transferred facilities will be accounted for on Niagara Mohawk's books as a deferred tax asset with a value of \$14.8m. National Grid will then recover the \$14.8m payment through tax deductions on our corporate income tax returns and earn a rate of return on the income tax obligation through the TSC and retail rates over the tax life of the asset.

Category: **Mandatory**

Spending Rationale: **Regulatory**

Risk score: **49, Primary Driver – Customer Driven**

Finance

Cost - **\$37.0m in the range of \$35.2m to \$38.9m.**

Probability that project cost will exceed applicable \$ range: - **10%**

Project included in approved Business Plan? - **No.**

Project cost relative to approved capital Business Plan - **+/- \$0m (no impact on business plan)**

If cost > approved B Plan how will this be funded? – N/A

Other financial issues: None.

\$m	Current planning horizon					Yr 6+	Total	Lower Range P20	Upper Range P80
	Prior Years	Yr 2 FY10/11	Yr 3 FY11/12	Yr 4 FY12/13	Yr 5 FY13/14				
Capex investment	0	0	0	0	0	0	0	n/a	n/a
Opex	0	0	0	0	0	0	0	n/a	n/a
Cost of Removal	0	0	0	0	0	0	0	n/a	n/a
Totals:	0	0	0	0	0	0	0	n/a	n/a

Resources

Availability of internal resources to deliver project: **Green**
 Availability of external resources to deliver project: **Green**
 Operational impact on network system: **Green**

Key issues

- NYSPSC staff has indicated support of a transfer of the \$37M asset for \$1.00 and the handling of the \$14.8M income tax as a deferred liability.
- Empire State Development (ESD), the New York State agency funding LFTCEDC, has provided their support to move forward with the transfer of assets from LFTCEDC to National Grid
- The asset transfer must be completed prior to energizing Global Foundries to ensure compliance with the Niagara Mohawk Retail Tariff PSC 220

Key milestones

Milestone	Target Date: Month/Year
Sanction	8/25/2010
Execute Purchase and Sale Agreement	8/26/2010
File contract with FERC	8/27/2010
Ready for Commercial Operation	8/31/2010
First Asset Transfer – Lines from Mulberry and Luther Forest station	9/1/2010
Energize Global Foundries (retail customer)	Prior to 9/10/2010
Second Asset Transfer – Lines from Malta	November 2010
Third Transfer – Fee property rights	April 2011

Climate change

Contribution to National Grid's 2050 80% emissions reduction target: **Neutral**

Impact on adaptability of network for future climate change: **Neutral**

Are financial incentives (e.g. carbon credits) available? **No**

Prior sanctioning history including relevant approved Strategies

Related Strategies and Sanctions:

- 9/26/06 - Transmission Investment Committee SG060, Strategy to Reinforce the New York Northeast Region Transmission System (Luther Forest)
- 2/13/09 - Transmission Investment Committee SG097, Strategy to Reinforce the Transmission System in the Northeast Region of NY
- 10/21/09 - Transmission Investment Committee TIC 0916, Application to sanction project to modify 7 NG substations to accommodate LFTC

Recommendations

The **Transmission Investment Committee** is invited to:

- APPROVE entering into a Purchase and Sale Agreement to transfer assets with a fair market value of \$37m for \$1.00 and take on the income tax obligation of \$14.8m associated with the transaction.
- APPROVE DOA for the transfer of \$37.0m in the range of \$35.2m to \$38.9m for completion by **4/30/2011**
- NOTE that Mary Ellen Paravalos is the Project Sponsor

Signature... *Mary Ellen Paravalos* Date... *8/26/2010*
Mary Ellen Paravalos, Vice President Transmission Regulation and Commercial

Decision of the Transmission Investment Committee.

I hereby approve the recommendations made in this paper.

Signature... *N. Winser* Date... *2/2/10*
Nick Winser, Executive Director National Grid Transmission
on behalf of Transmission Investment Committee

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1. Background

- 1.1. Under an August 8, 2002 MOU with Saratoga Economic Development Corp. (SEDC), National Grid initially provided services to help develop the high level conceptual design of the Luther Forest Technology Campus (LFTC). On February 8, 2005, the MOU was superseded by a Support Services Agreement to perform a system reliability study (SRIS) at the NYISO for the proposed redundant transmission service to LFTC.
- 1.2. As part of its development of the Luther Forest Technology Campus, SEDC created Luther Forest Technology Campus Economic Development Corporation (LFTCEDC) to develop the site, including developing the electric transmission service. Based on the SRIS, LFTCEDC acquired land rights and permits for a new direct interconnection facility composed of 2.8 miles of double circuit 115kV lines (1.3 miles of which will be installed underground) between National Grid's Malta substation and a new 115kV Luther Forest Switching Station and two new 115kV single circuits (each 5.8 miles in length) from Luther Forest station to tap lines near NYSEG's Mulberry substation. The electrical redundancy and power quality issues required by the targeted chip manufacturing industry dictated the transmission service design for the site and in 2009 Global Foundries (GF) chose to site its computer chip manufacturing facility at the LFTC site.
- 1.3. In 2009, engineering and construction of this "direct interconnection" build-out was started by LFTCEDC. Under an Engineering, Permitting & Construction Agreement, National Grid is providing engineering and inspection services to insure that the new facilities meeting our standards.
- 1.4. The construction of the new Luther Forest station and the two 115kV transmission lines to Mulberry station are scheduled to be completed by the end of August, 2010, and are expected to be energized on or before September 10, 2010. The construction of the lines between Malta and Luther Forest Station is planned for the end of October, 2010, to be energized in mid-November.
- 1.5. The direct interconnection facilities will be transferred to National Grid in three separate closings;
 - 1.5.1. The first transfer will include the new Luther Forest station and the two 115kV lines from Mulberry. This transfer will need to occur before those assets are energized on September 10, 2010.
 - 1.5.2. The second transfer will include the two 115kV lines between Malta and Luther Forest Station and the underground to overhead transition station (Stonebreak Road station). The second transfer will occur before the assets are energized in mid-November, 2010.
 - 1.5.3. The third and final transfer will occur in April 2011 and will include the transfer of fee title to those properties which LFTCEDC has the already obtained the right to convert from easement to fee rights.

- 1.6. In parallel with the development of the Luther Forest Technology Campus, New York State Energy Research Development Authority (NYSERDA) is developing the 280 acre Saratoga Technology Energy Park (STEP) site adjacent to the LFTC campus, 90% of which is in National Grid's franchise territory. At full build-out, the park can accommodate 1.25 million square feet of office and laboratory space. National Grid will be obligated to serve these customers as each load develops and will utilize the above direct interconnection facilities.

2. Driver

- 2.1. There are five main drivers to transferring the facilities 1) Under the retail tariff PSC220 only Niagara Mohawk can serve retail load in its franchise territory, 2) Ownership of the facilities eliminates extremely complex arrangements with a lightly regulated utility power system, 3) Eliminates the uncertainty of escalating costs associated with renegotiation of a lease arrangement, 4) this solution can be completed in time to meet Global Foundries in service date, 5) the NYPSC has an expectation that National Grid owns the facilities.
- 2.2 The first driver is the retail tariff which does not allow other utilities to serve retail load in Niagara Mohawk service territory. Due to this requirement one of two options must be selected for the assets, the ownership is transferred to National Grid or the rights are leased to National Grid.
- 2.3 The second driver is the complexity of the lease and operational arrangement which would be required for Luther Forest to maintain ownership of the assets. In addition to the complexity, National Grid would have the obligation to serve Global Foundries under the retail tariff regardless of Luther Forest's performance under the lease or operational agreements putting the company in a challenging position.
- 2.4 The third driver is to eliminate the uncertainty of escalating costs associated with renegotiating a short term lease arrangement, which would be required to avoid triggering the income tax obligation.
- 2.5 The formation of a lightly regulated utility will likely be contested and take a considerable amount of time. The delay would eliminate the possibility of meeting Global Foundries schedule and impact the economic benefits the region is expecting.
- 2.6 National Grid and Luther Forest have set an expectation with the NYPSC that the assets will be transferred to National Grid for \$1.00 and that National Grid will fund the tax obligation associated with asset transfer.

3. Project Description

- 3.1. The new Luther Forest Station is composed of the following major equipment: 11-115kV breakers, 2 - 54 Mvar Cap Banks, 2- 1.3 mH reactors, associated switches, and controls.
- 3.2. The new Transmission Line from Mulberry to Luther Forest Station is composed of: Two 5.8 miles long 115kV circuits on wooden structures.

- 3.3. The new Transmission Line assets from Malta to Luther Forest Station are composed of property rights in fee or easement, 1.3 miles of underground double circuit 115 kV cabling including conduit for a 4 lane highway crossing, an underground to overhead transition station (Stonebreak Road Station), and 1.5 miles of double circuit 115kV on wooden structures.
- 3.4. An area map of the existing 115kV system and the new facilities is provided in Appendix A.

4. Business Issues

- 4.1. Development of the LFTC campus is the largest economic development project in the history of New York State and is expected to transform the economy of the eastern division of National Grid.
- 4.2. At full build out, the 1350 acre Luther Forest Technology Campus could represent more than \$18b in capital investment and employ 10,000 highly skilled employees. There has been a great deal of national and international public exposure associated with the project. Apart from local media exposure, this project has been discussed in publications such as the NY Times, Electric Light and Power Magazine, and Small Times Magazine. The project also received national attention by winning the 2006 Gold Award for the Economic Development Deal of the Year by Business Facilities Magazine.
- 4.3. LFTCEDC and the State of New York will transfer the \$37M assets to National Grid for \$1.00, but they will not cover any income tax burden.
- 4.4. Although cost recovery is not guaranteed, the NYSPSC staff has agreed in principle with National Grid undertaking the income tax obligation and placing a deferred tax asset on our books.

5. Options Analysis

- 5.1. Option 1, Do Nothing. Option 1 was rejected because it does not fulfill the customers request to have electric service by September 2010.
- 5.2. Option 2 (Recommended), Undertake the proposed asset transfer for \$1.00 and take on the income tax obligation associated with the transfer.
- 5.3. Option 3, Purchase the assets at their fair market value of \$37 Million. Purchasing the assets for their fair market value would eliminate the income tax obligation. This option was rejected due to the fact that Niagara Mohawk rate payers should not be responsible for funding the entire value of the assets which are primarily used by one industrial customer.
- 5.4. Option 4, LFTCEDC retains ownership of the assets and leases them to National Grid. This option was rejected for three main reasons: first it would require LFTCEDC to create a lightly regulated utility in the middle of our service territory, secondly it would require renegotiation of the lease every 5 to 7 years to avoid the income tax obligation, and finally due to the complexity of the lease and operating arrangements which would be required.
- 5.5. Recommendation: Option 2

6. Milestones

Milestone	Target Date: Month/Year
Transfer Sanction	8/25/2010
Execute Purchase and Sale Agreement	8/26/2010
File contract with FERC	8/27/2010
Ready for Commercial Operation	8/31/2010
First Asset Transfer – Lines from Mulberry and Luther Forest station	9/1/2010
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7. Safety, Environmental and Planning Issues

7.1. Outage

7.1.1. An outage is not necessary to accomplish the transfer.

7.2. Safety

7.2.1. All safety procedures will be adhered to when the equipment is being commissioned and energized.

7.3. Environmental

7.3.1. Environmental permitting for the new Lines and Station was performed by LFTCEDC and its contractors, results have been provided and reviewed by National Grid as part of their due diligence associated with the transfer.

7.3.2. Parcels being transferred with any previous environmental history are being transferred as an easement not in fee to ensure National Grid does not take on any additional environmental risk.

Investment Recovery

8. Investment Classification

8.1. This project is classified as a mandatory project because of the need to meet a customer's load requirement.

8.2. Investment Recovery

8.2.1. Transferring the assets for \$1.00 will have a negligible impact on the capital plan.

8.2.2. The physical assets will be placed on our books for \$1.00 and will have a negligible impact on the Niagara Mohawk rate base.

8.2.3. The tax obligation which is expected to be approximately \$14.8m will be treated as a deferred tax asset on our tax books.

8.2.4. The \$14.8m payment will be offset by deductions on the corporate income tax returns over the tax life (15 years) of the asset.

8.2.5. The deferred tax asset will increase Niagara Mohawk's rate base by the value of the tax asset.

- 8.2.6. Niagara Mohawk will earn a return on the increased level of rate base over the tax life of the asset.
- 8.2.7. An example of how the tax liability will be accounted for is attached in Appendix B.

9. Regulatory Implications

9.1. Regulatory Implications

- 9.1.1. Based on anticipated National Grid ownership of the station and lines a Section 68 franchise filing was completed in order to build the facilities since the NYSEG and Niagara Mohawk franchise territories splits the LFTC site.
- 9.1.2. The transfer of assets has been included in both the original and rebuttal testimony in the pending Niagara Mohawk rate case.
- 9.1.3. The Purchase and Sale Agreement will be filed with FERC under section 205 of the Federal Power Act. It was determined that the agreement does not need to be filed with the NYPSC.
- 9.1.4. Due to the fact that the facilities are being transferred prior to being energized there will be no additional FERC filings required under 203 of the Federal Power Act.
- 9.1.5. In addition to the filings, National Grid and NYSEG have executed an agreement to layout the roles and responsibilities at the franchise line. It was determined that the agreement does not need to be filed with the NYPSC.

10. Customer Impact

- 10.1. Global Foundry and other site tenants are key customers that are impacted by this transfer.
- 10.2. Overall Niagara Mohawk's eastern region will benefit significantly from the economic development created by energizing the LFTC site.

Financial Impact

11. Cost Summary

	\$m	Current planning horizon					Yr 6+	Total	Lower Range P20	Upper Range P80
		Prior Years	Yr 2 FY10/11	Yr 3 FY11/12	Yr 4 FY12/13	Yr 5 FY13/14				
Capital Investment	Proposed Sanction	0	0	0	0	0	0	0	n/a	n/a
	Capital plan	0	0	0	0	0	0	0		
	Variance to plan	0	0	0	0	0	0	0		
	Unit cost allowance	0	0	0	0	0	0	0		
O&M	Proposed Sanction	0	0	0	0	0	0	0		
Removal	Proposed Sanction	0	0	0	0	0	0	0		
	Totals:	0	0	0	0	0	0	\$0		

	Proposed Sanction	
Material	0	
Labor	0	
Other	0	
Transportation	0	
Reimbursement	\$37.0m	Fair Market Value of the assets being transferred for \$1.00
Labor Adders	0	
Contractor	0	
AFUDC	0	
Salvage	0	
Removal	0	
O&M	0	
Retirement	0	
Total	\$37.0m	

12. Cost Assumptions

The estimate assumes:

- The paper is based upon +/- 5% contingency.
- Recovery of the tax costs from the project will be included in the new Niagara Mohawk rate plan.
- The construction costs associated with the two transmission lines from the Malta substation are constructed within the forecasted budget.
- That FERC will accept our cost allocation proposal.

13. Benefits Summary

Niagara Mohawk Power Corporation

Niagara Mohawk's bundled delivery rates for T&D in New York are currently fixed within a 10-yr rate plan that was set to expire on December 31, 2011. In January 2010, Niagara Mohawk filed a proposal to revise the fixed cost recovery levels effective January 1, 2011. Testimony of the Company in this case requests approval for recovery of capital costs if FERC rules that NMPC must buy the facilities from the customer or, if FERC approves the contract, allows recovery of the tax cost through future tax filings.

This specific transfer will not have an impact on the capital program.

This project has significant economic benefits to the local communities located in Niagara Mohawk's eastern region.

14. NPV

14.1. This project is not financially driven.

15. Additional Impacts

15.1. No additional financial impacts have been identified

16. Execution Risk Appraisal

16.1. The Purchase and Sale Agreement for the asset transfer will be filed at FERC. There is a possibility that FERC may unwind the financial arrangement if they determine that the costs for transmission assets should be fully funded by the Transmission Owner. As such, National Grid would be obligated to pay the full market value of the assets, \$37M. Paying the full market value for the assets would eliminate the income tax obligation but have an impact on our capital plan and regulatory strategy with the NYPSC.

16.2. There is a risk that National Grid is entering into the transfer agreement and taking on the tax obligation without formal NYPSC approval for cost recovery. This risk has been mitigated to the best possible extent through meetings with the NYPSC which resulted in a statement of support from NYPSC Staff.

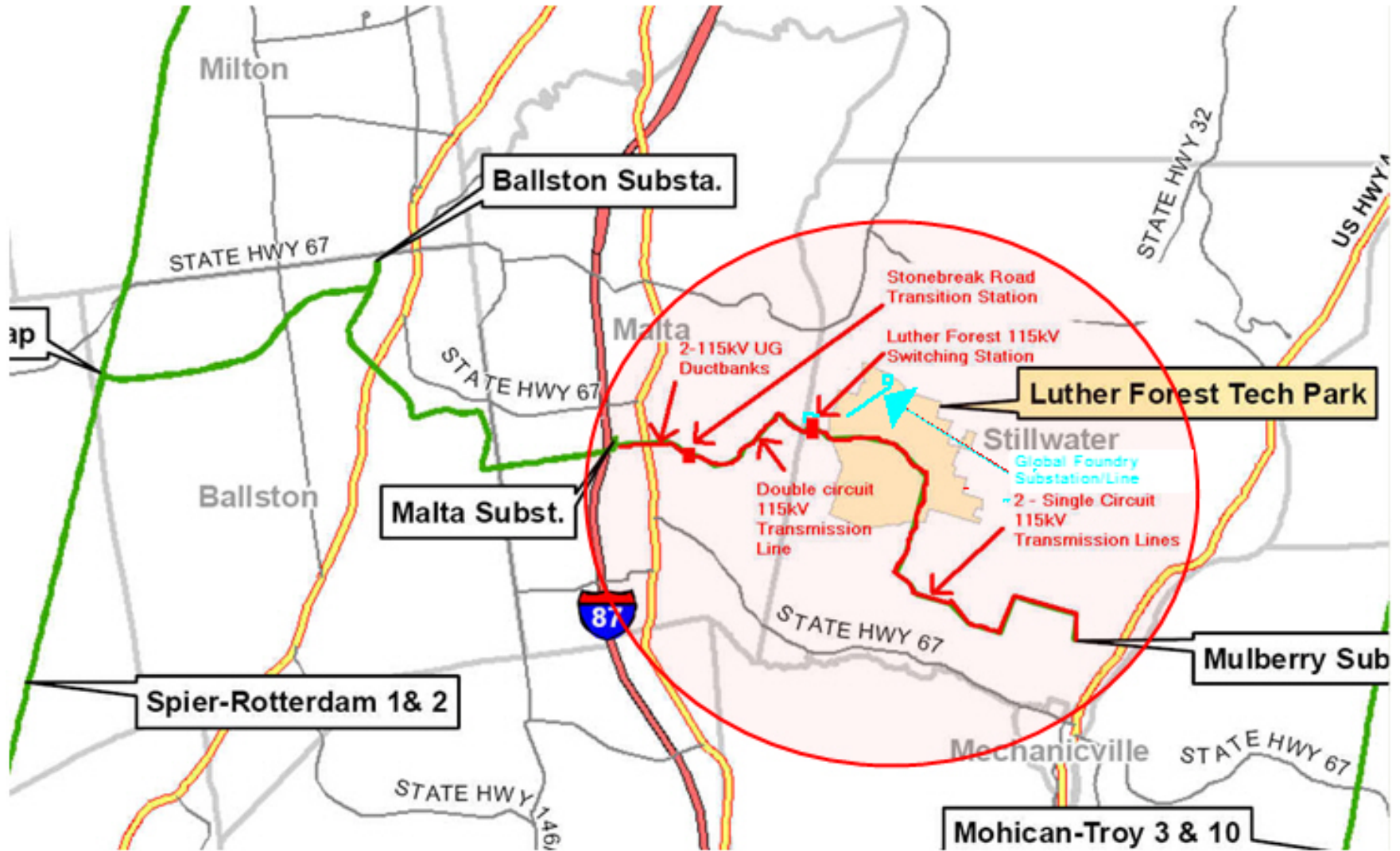
17. Statements of Support

“Authors of this paper assure that in accordance with TGP 11 the supporters listed below have been consulted and that each function listed below supports this paper.”

Supporters

- Director – Transmission Investment Management
- Director – Transmission Planning
- Director – Transmission Asset Strategy
- Director – Transmission Commercial Services
- Director – Transmission Finance
- Director – Regulatory Strategy
- Director – Project Management
- Director – Transmission Line Engineering
- Director – Substation Engineering
- Director – Protection and Meter Engineering
- Director – N.Y. Control Center
- Manager – US Tax

Appendix - A



Appendix - B

**Accounting for Luther Forest Tax Liability
(000)**

NGRID to obtain \$37M Luther Forest assets for \$1 with a tax liability

Assumptions:

Cost	0																
CIAC	0																
Tax Basis	37,000																
Tax life	15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Tx rate by yr		5.00%	9.50%	8.55%	7.70%	6.93%	6.23%	5.90%	5.90%	5.91%	5.90%	5.91%	5.90%	5.91%	5.90%	5.91%	2.95%
Tax rate (FIT & SIT)	40%																

	BALANCE SHEET								INCOME STATEMENT				
	Asset		Tax Liability		Accum Def Income Tx			Curr Def Tx Exp		Current Tx Exp			
	Dr	Cr	Dr	Cr	Dr	Cr	Ratebase	Dr	Cr	Dr	Cr		
1) Record Asset on books	1												
2) Record tax liability/expense on transfer				14,800								14,800	
3) Set up deferred taxes						14,800		14,800		14,800			
4) Record tax deprec/reversal of deferred txs													
Yr		Tax Deprec	Book Deprec										
1		1,850	0		740		740	14,060		740		740	
2		3,515	0		1,406		1,406	12,654		1,406		1,406	
3		3,164	0		1,265		1,265	11,389		1,265		1,265	
4		2,849	0		1,140		1,140	10,249		1,140		1,140	
5		2,564	0		1,026		1,026	9,223		1,026		1,026	
6		2,305	0		922		922	8,301		922		922	
7		2,183	0		873		873	7,428		873		873	
8		2,183	0		873		873	6,555		873		873	
9		2,187	0		875		875	5,680		875		875	
10		2,183	0		873		873	4,807		873		873	
11		2,187	0		875		875	3,932		875		875	
12		2,183	0		873		873	3,059		873		873	
13		2,187	0		875		875	2,184		875		875	
14		2,183	0		873		873	1,311		873		873	
15		2,187	0		875		875	437		875		875	
16		1,092	0		437		437	0		437		437	
		<u>37,000</u>	<u>0</u>		<u>1</u>	<u>0</u>	<u>14,800</u>	<u>14,800</u>		<u>14,800</u>	<u>14,800</u>	<u>14,800</u>	<u>14,800</u>