

Planning the Future of Your Farm

Solar Lease Impact, Decision and Negotiation

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Impact of HB 589

- Removed all but smallest projects from Public Utilities Regulatory Policy Act (“PURPA”)
- Projects now routed through Request for Proposal Process (RFP) on Duke Energy needs
- Eastern projects already in “queue” are allowed to move forward
- Project locations will likely shift west of I-95 (closer to markets, where Duke places them)
- Price of projects should go up, closer land is to customer base (urban areas)

What the Solar Farm means for you and your neighborhood

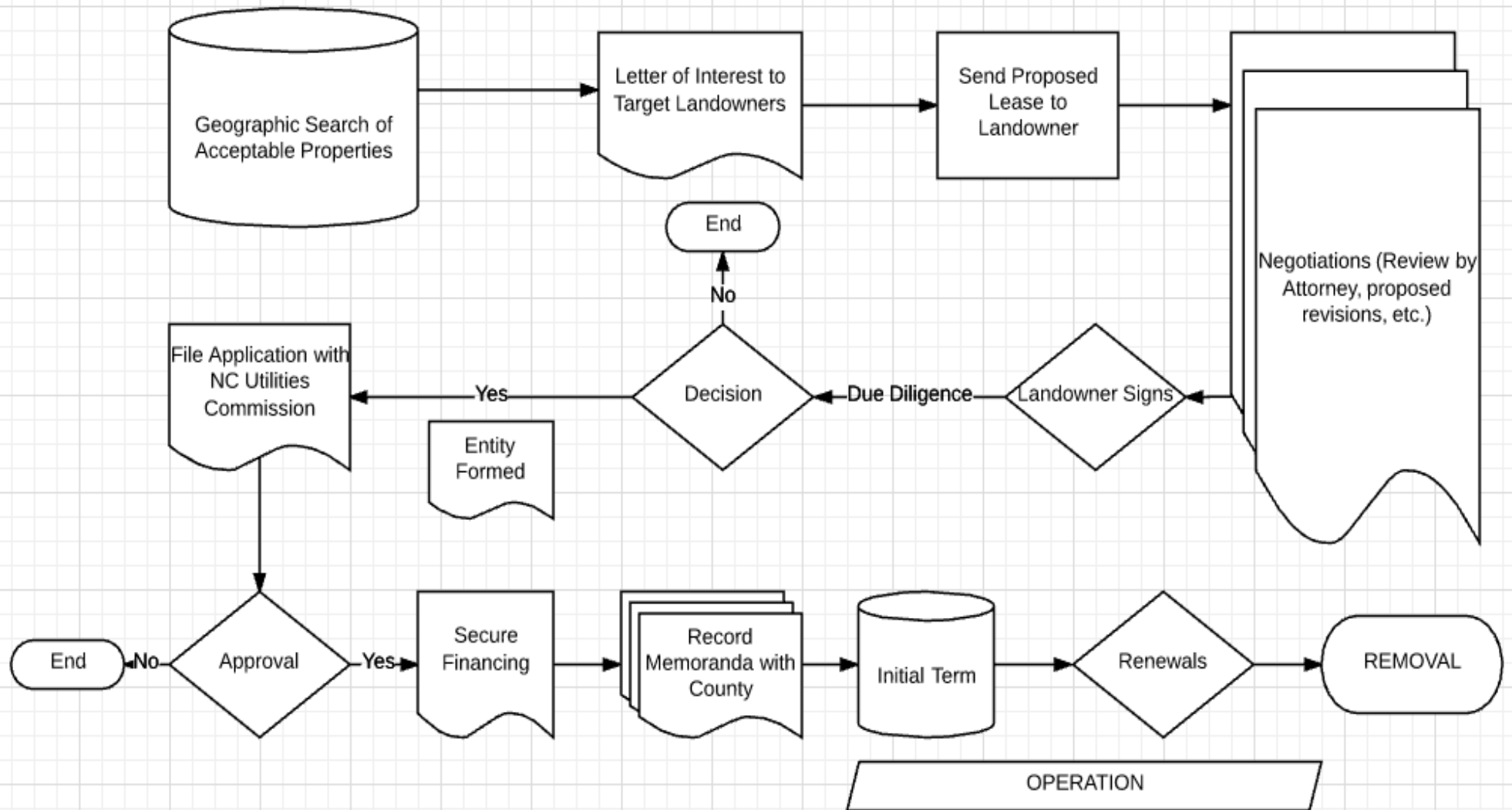
- Multi-generation income stream to landowner
- Loss of land for the farmer
 - Unless farmer also owns the land
 - Potential increase in farm rent?
- Commercial solar tax credits discontinued
- Increase in local tax base
 - Significant tax on new assets (chart comparison)
 - No comprehensive “multiplier” study

Impact on Tax Base

See Exhibit 4

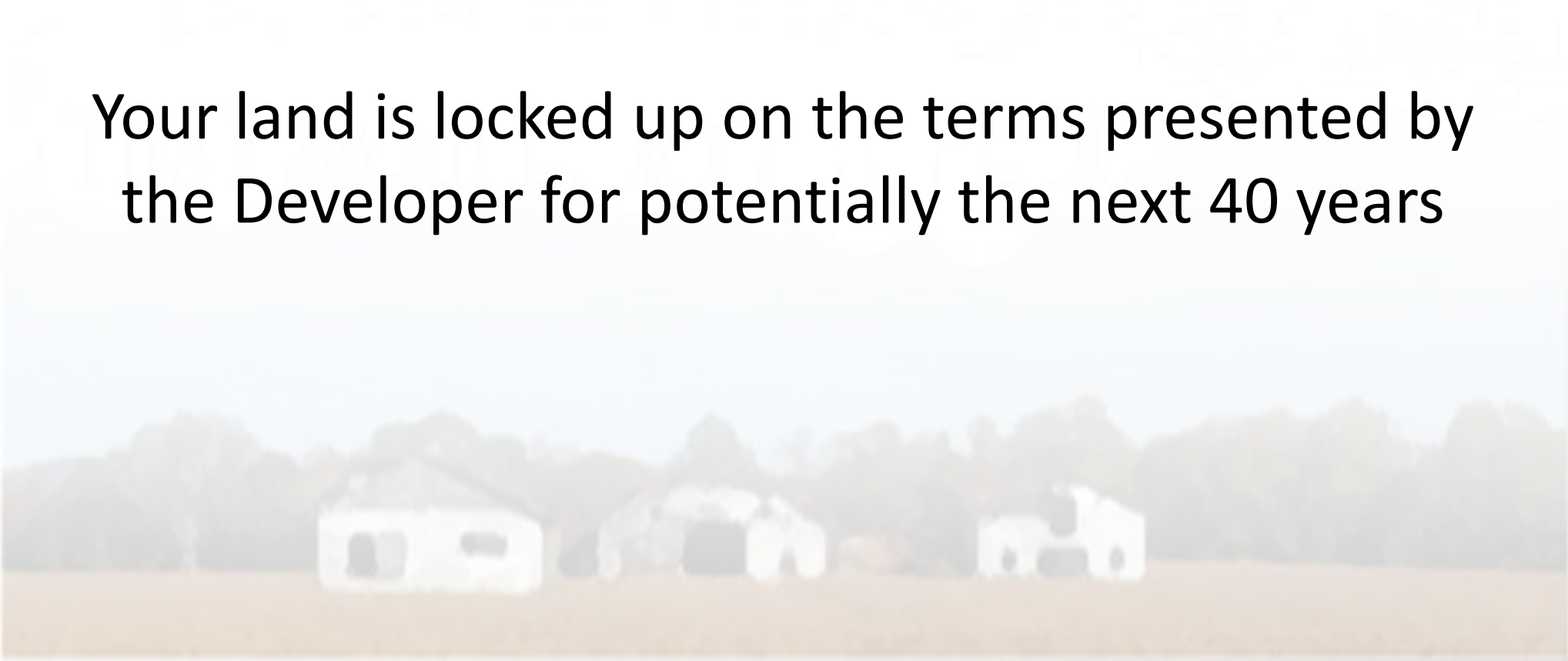
Property Tax Receipt Increase Model								
Project One (~35 acres)								
	Before				After		Solar Facilities	
	Value (high)	Value (PUV)	Tax (PUV)	Tax (Rollback)	Value	Tax	Value	Tax
2012		\$ 9,034.00	\$ 85.64					
2013	\$207,777.00	\$ 9,034.00	\$ 85.64	\$ 2,130.20				
2014	\$207,777.00	\$ 9,034.00	\$ 85.64	\$ 2,130.20				
2015	\$207,777.00	\$ 9,034.00		\$ 2,238.29				
2016					\$ 166,200.00	\$ 1,575.58	\$ 1,731,620.00	\$ 16,415.75
2017					\$ 130,100.00	\$ 1,178.06	\$ 1,731,620.00	\$ 16,415.75
Annual Tax Before								
Annual Tax Before (excluding rollback)*				\$ 85.64	Annual Tax After*			\$ 17,593.81
*one annual PUV tax payment					*sum land and facility exclud			
Est. Annual Tax Before (without PUV)*				\$ 2,052.84				
County Rate	0.00878							
Fire District	0.0011				Abatement NCGS §105-275 (80%)			\$ 4,461.21
Project Two (~53 acres)								
	Before				After		Solar Facilities	
	Value (high)	Value (PUV)	Tax (PUV)	Tax (Rollback)	Value	Tax	Value	Tax
2012		\$120,315.00	\$ 1,140.47					
2013	240100	\$120,315.00	\$ 1,140.47	\$ 1,875.18				
2014	240100	\$120,315.00	\$ 1,140.47	\$ 1,925.72				
2015	240100			\$ 1,925.72				
2016					\$ 218,500.00	\$ 2,152.31	\$ 2,724,709.00	\$ 26,920.00
2017					\$ 415,982.00	\$ 3,847.43	\$ 2,724,709.00	\$ 26,920.00
Annual Tax Before (excluding rollback)*				\$ 1,140.47	Annual Tax After*			\$ 30,767.43
*one annual PUV tax payment					*sum land and facility exclud			
Est. Annual Tax Before (without PUV)*				2372.188				
County Rate	0.00878				Abatement NCGS §105-275 (80%)			\$ 6,153.49
Fire District	0.0011							

Timeline of Solar Facility



With the first signature...

Your land is locked up on the terms presented by the Developer for potentially the next 40 years



Decision to Sign

- Income calculation from lease
 - Payment over time
 - Annual increases
 - Net Present Value of Future Payments
- Income calculation from sale of land
 - Lump sum to reinvest but no high low risk return
- Loss of parcel as threat to farm succession?
 - Farm legacy vs. Income stream
- Understand what is negotiable
- Try to understand your leverage
 - Proximity to 'acceptable' substation
 - Other cleared land nearby
 - Difficult to ascertain neighbor decisions

Projected Payments (Sample)

- Due Diligence Period
 - \$250 for 180 days (6 months)
 - \$1000 for 545 days (1.5 years)
 - \$5000 for next 365 days (1 year)
 - \$10,000 for additional 365 days (1 year)
- (Alternate) # development terms: \$7500 per year
- Operation Term: \$850 per acre per year
 - Unknown total acreage in lease area
 - Specify a minimum acreage?
 - % annual increase in rent
- Potential Operation Term: 20 years with four 5-year renewal terms

Payments Calculator (Beta)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Revenue Comparisons: Solar, Farming and Sale															
2							Year Count	Year Actual								
3	Data from Offer Lease				Enter data below			2017	Solar Lease Annual Rent (% of Parcel)				Farm Rent	Return From Sale of Land		
4	First Due Diligence Payment (for 180 days)				\$250.00				100%	50%	25%		100%	100%		
5	First Due Diligence Extension (for 545 days)				\$1,000		0.5		250.00	250.00	250.00		5,000.00	\$300,000.00		
6	Second Due Diligence Extension (for 363 days)				\$5,000		.5 to 2		\$1,000	\$1,000	\$1,000					
7	Third Due Diligence Extension (for 363 days)				\$ 10,000		2 to 3		\$5,000	\$5,000	\$5,000					
8	Production Term Lease Payment (per acre)				\$850		3 to 4		\$10,000	\$10,000	\$10,000					
9	Annual Increase				2%		Total Pre Operation		16,250.00	16,250.00	16,250.00					
10	Parcel Size (acres)				50		5	2022	\$42,500	\$21,250	\$10,625					
11	Production Term (years)				20		6	2023	\$43,350	\$21,675	\$10,838					
12	First Extension Term				5		7	24	\$44,217	\$22,109	\$11,054					
13	Second Extension Term				5		8	25	\$45,101	\$22,551	\$11,275					
14					5		9	26	\$46,003	\$23,002	\$11,501					
15	Net Present Value (NPV) Discount				96%		10	27	\$46,923	\$23,462	\$11,731					
16							11	28	\$47,862	\$23,931	\$11,965					
17							12	29	\$48,819	\$24,410	\$12,205					
18	Farm Rent Data						13	30	\$49,796	\$24,898	\$12,449					
19	Farm Rent Per Acre				\$ 100.00		14	31	\$50,791	\$25,396	\$12,698					
20							15	32	\$51,807	\$25,904	\$12,952					
21	Parcel Market Value Data						16	33	\$52,843	\$26,422	\$13,211					
22	Parcel Tax Value				\$ 200,000.00		17	34	\$53,900	\$26,950	\$13,475					
23	Multiplier for Market Value				150%		18	35	\$54,978	\$27,489	\$13,745					
24	Estimated Market Value				\$ 300,000.00		19	36	\$56,078	\$28,039	\$14,019					
25							20	37	\$57,199	\$28,600	\$14,300					
26	Assumptions:						21	38	\$58,343	\$29,172	\$14,586					
27	1. Cumulative Totals subject to NPV discount						22	39	\$59,510	\$29,755	\$14,878					
28	2. Due diligence lasts full 4 year exercise						23	40	\$60,700	\$30,350	\$15,175					
29	3. Construction begins no later than 4 years from signing						24	41	\$61,914	\$30,957	\$15,479					
30	4. 20 year initial term (begins after maximum due diligence)						25	2042	\$63,153	\$31,576	\$15,788					
31	5. three (3) renewal terms of 5 years each						Cumulative total (NPV)		\$1,067,559	\$533,780	\$266,890					
32	6. Farm Rent Increases with Inflation (2%)						26	2043	\$64,416	\$32,208	\$16,104					
33	7. Sale of Land can occur in any year, add farm rent up to that point						27	44	\$65,704	\$32,852	\$16,426					
34	8. Sale of land reduced by (not shown in exercise)						28	45	\$67,018	\$33,509	\$16,755					
35	a) capital gain						29	46	\$68,359	\$34,179	\$17,090					
36	b) roll-back of Present Use Value						30	2047	\$69,726	\$34,863	\$17,431					
37	c) costs of sale						Cumulative total (NPV)		\$1,346,671	\$673,335	\$336,668					
38	d) Net Present Value Discount						31	2048	\$71,120	\$35,560	\$17,780					
39	9. Annual Tax Rate bracket increases not subject of exercise						32	49	\$72,543	\$36,271	\$18,136					
40	10. Land Appreciation rate trends positive						33	50	\$73,994	\$36,997	\$18,498					
41	11. Net Present Value Rate stays constant						34	51	\$75,473	\$37,737	\$18,868					
42							35	2052	\$76,983	\$38,491	\$19,246					
43							Cumulative total (NPV)		\$ 1,648,112	824,056	412,028					
44							36	2053	\$ 78,523	\$39,261	\$19,631					
45							37	54	\$ 80,093	\$40,046	\$20,023					
46							38	55	\$ 81,695	\$40,847	\$20,424					
47							39	56	\$ 83,329	\$41,664	\$20,832					
48							40	2057	\$ 84,995	\$42,498	\$21,249					
49							Cumulative total (NPV)		\$1,974,476.50	987,238	\$493,619					

Due Diligence Issues

- Can you convey good title?
 - Co-owners in agreement
- Are there restrictions on your property that are incompatible?
 - Zoning (anticipate set-back waivers)
 - Land as collateral
 - Existing encumbrances (tax liens, etc.)
 - Conservation Easement (may not specifically allow solar facility)
- Beginning of due diligence period is acceptance of lease terms as presented

Generally Non-negotiable

- Items having to do with project financing
 - Lessee assignment
 - Agreement to cooperate (signing future documents)
- Issues dealing with collateral in bankruptcy
 - Interference
- Access to some roads (no access inside the 'facility')

Points of Negotiation

- Attorney Fees (within 60 days of execution)
- Signing bonus (incentive for attorney)
- Priority of build out on leased parcel
- Fracking drill islands (?)
- Elimination of non-leased buffer
- Have the company harvest timber (DEQ rules)
- Preservation of use of surrounding non-leased property (no restrictions on forestry, combining crops, etc.) (interference)
- **Payment of PUV Roll Back**

Confidentiality Clause

- Primarily erodes bargaining positions
- Insert “commercially reasonable”
- Key Add-In exceptions to blanket Clause
 - Discuss with advisers (tax, lawyer)
 - Disclose to lender
 - Potential purchasers of property



Property Taxes

- Payment of property taxes
 - PUV Rollback
 - Be sure to negotiate payment of rollback by Developer
 - See addendum item #1
- Survey to Separate Parcel if possible
 - See addendum item #2
- Sever solar facilities (personal property) to tax bill paid by Developer/Owner

Provision for Project Failure

- Insolvency/bankruptcy clause
 - Generally non-negotiable, except...
 - Confirm continued payment of rent
- Provision for removal of equipment
 - Bond?
 - Sample bond clause (See addendum item #3)
- Restoration of land
 - Must restore to fitness for agricultural use
 - Replanting of trees (why not try?)

Project footprint

- Foot print
 - Work on exhibit (“directional development”)
 - No Buffers!
 - Get Copy of Survey (to confirm against recorded plat)
- Land for Access
 - Access easements
 - Exclusivity of easements (use for farming and forestry)
 - Construction standards suitable for farming and forestry
- Reimbursement for damages
- “Skyway” Easement
 - Prohibitions on adjacent land (shading, etc.)
 - Non-interference exceptions for farming practices

Assignment and Right to Purchase

- Lease will contain a Right of First Offer
 - If move to sell the land
 - Make sure this is not a blanket “put” option
- Ensure clarifying language
 - Transfer to Trust does not trigger ROF
 - Transfer to LLC (owned by family) does not trigger ROF
 - Gift of interest in land (to lineal descendant) does not trigger ROF

Insurance, Indemnification, Disputes

- Commercial liability
 - \$500,000/\$1,000,000 aggregate
- Mutual Indemnification
 - Beware one-sided language
- Workers Compensation
- Payment of Attorney Fees in Dispute
- Mediation over Arbitration

Current Crops and Tenant

- Current Farm Tenancy
 - Written lease with farmer is enforceable
 - Oral lease is protected by statute (note statute termination dates)
- Do not sign solar lease option until working out deal with the farmer
- Give farmer 6-12 month notice, then duty to mitigate (i.e. find other land, buy less inputs, etc.)
- Costs of termination:
 - Farmers money in the dirt
 - Percentage of farmer's lost sales net harvesting costs
 - Use crop consultant (or NCSU) to validate yield claims
- Put a termination clause in your *written* lease with farmer
 - Specific formula for termination payment (remaining years)

Thanks for inviting me!

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