RECEIVED

March 10, 2025
STATE OF NEVADA
DEPARTMENT OF TAXATION

Form 5101SBE

Nevada State Board of Equalization

Taxpayer Petition for Appeal from the Decision of the County Board of Equalization

If you have questions about this form or the appeal process, please call: (775) 684-2160.
Email completed form to: stateboard@tax.state.nv.us or Fax (775) 684-2020 EMAIL or FAX by 5:00 p.m. March 10, 2025
Mail: State Board of Equalization, 3850 Arrowhead Dr, Carson City, NV, 89706 POSTMARK by 5:00 p.m. March 10, 2025

Please Print or Type:

Part A. PROPERTY OWNER AND PETITIONER INFORMATION

NAME OF PROPERTY OWNER AS IT APPEARS ON THE TAX ROLL: TOWNSITE SOLAR AREVON LLC					
NAME OF PETITIONER (IF DIFFERENT THAN PROPERTY OWNER LISTED IN PART A):				TITLE	
MAILING ADDRESS OF PETITIONER (STREET ADDRESS OR P.O. BOX): 8800 N GAINEY CENTER DR., STE 100				EMAIL ADDRESS: Indirect-Tax@arevonenergy.com	
CITY: SCOTTSDALE	STATE: AZ	ZIP CODE: 85258	DAYTIME PHONE: 480-789-3798	ALTERNATE PHONE	FAX NUMBER

Part B. PROPERTY OWNER ENTITY DESCRIPTION

Check organization type which best describes the Property Owner if an entity and not a natural person. Natural persons may skip Part B.

☐ Sole Proprietorship ☐ Trust ☐ Corporation
☒ Limited Liability Company (LLC) ☐ General or Limited Partnership ☐ Government or Governmental Agency
☐ Other, please describe: ____________

The organization described above was formed under the laws of the State of ____________.

The organization described above is a non-profit organization. ☐ Yes ☒ No

Part C. RELATIONSHIP OF PETITIONER TO PROPERTY OWNER IN PART A

Check box which best describes the relationship of Petitioner to Property Owner: ☑ Additional information may be necessary.

☐ Self ☐ Trustee of Trust ☐ Employee of Property Owner
☐ Co-owner, partner, managing member ☐ Officer of Company
☒ Employee or Officer of Management Company
☐ Employee, Officer, or Owner of Lessee of leasehold, possessory interest, or beneficial interest in real property
☐ Other, please describe: ____________

Part D. PROPERTY IDENTIFICATION INFORMATION

1. Enter Physical Address of Property:

ADDRESS	STREET/ROAD	CITY (IF APPLICABLE)	COUNTY
13316	US HWY 95 S	BOULDER CITY	CLARK

2. Enter Applicable APN or Account Number from assessment notice or tax bill:

ASSESSOR'S PARCEL NUMBER (APN)	ACCOUNT NUMBER
	230123

3. Does this appeal involve multiple parcels? Yes ☐ No ☒ *List multiple parcels on a separate, letter-sized sheet.*

If yes, enter number of parcels: ____ Multiple parcel list is attached. ☐

4. Check Property Use Type: ☑

☐ Vacant Land ☐ Mobile Home (Not on foundation) ☐ Mining Property
☐ Residential Property ☐ Commercial Property ☐ Industrial Property
☐ Multi-Family Residential Property ☐ Agricultural Property ☒ Personal Property
☐ Possessory Interest in Real or Personal property

5. Check Year and Roll Type of Assessment being appealed: ☑

☐ 2025-2026 Secured Roll ☐ 2024-2025 Unsecured Roll ☐ 2024-2025 Supplemental Roll
☐ 2025-2026 Centrally-assessed Roll ☐ 2024-2025 Net Proceeds Roll

Other years being appealed: 2021-2022 Unsecured Roll

Be prepared to cite the legal authority, if any, that permits the State Board to consider appeals of taxable value from prior years.

Part E. VALUE OF PROPERTY

	As established by County Board of Equalization		Property Owner: *What is the value you seek? Write N/A on each line for values which are not being appealed.*	
Property Type	Taxable Value	Assessed Value	Taxable Value	Assessed value
Land			N/A	N/A
Buildings			N/A	N/A
Personal Property	504,676,562	176,636,797	375,214,698	131,325,144
Total	504,676,562	176,636,797	375,214,698	131,325,144

For Clerk Use Only: 25-139

Form 5101SBE

Part F. TYPE OF APPEAL

Check box which best describes the authority of the State Board to take jurisdiction to hear the appeal.

☒ NRS 361.360(1); NRS 361.400(2): The value of real or personal property is being appealed; the Petitioner is aggrieved at the action of the County Board or the failure of the County Board to equalize resulting in overvaluation of property or undervaluation or non-assessment of other property.

☐ NRS 361A.240(2)(b): The under-or-over valuation of open-space use property is being appealed

☐ NRS 361A.273(1): This is an appeal of a determination that agricultural property has been converted to a higher use and for valuations for deferred tax years; the notice of conversion from the assessor was received after July 1 and before December 16 and the appeal was heard by the County Board.

☐ NRS 361.360(1); NAC 361.747(2)(c): The property was denied an exemption that is allowed by law. If so, describe the applicable exemption: ______

☐ Other reason, please describe. ______

Part G. ATTACH A BRIEF STATEMENT OR LETTER DESCRIBING THE ISSUES AND CONTENTIONS IN THIS APPEAL.

Part H. COUNTY APPEAL INFORMATION

County in which appeal was heard:	County Case Number:	Date Heard by County:
CLARK	495	2/26/2025

VERIFICATION

I verify (or declare) under penalty of perjury under the laws of the State of Nevada that the foregoing and all information hereon, including any accompanying statements or documents, is true, correct, and complete to the best of my knowledge and belief; and that I am either (1) the person who owns or controls taxable property, or possesses in its entirety taxable property, or the lessee or user of a leasehold interest, possessory interest, beneficial interest or beneficial use, pursuant to NRS 361.334; or (2) I am a person employed by the Property Owner or an affiliate of the Property Owner and I am acting within the scope of my employment. If Part I below is completed, I further certify I have authorized each agent named therein to represent the Property Owner as stated and I have the authority to appoint each agent named in Part I.

▶ Eric Huswick — Petitioner Signature

VICE PRESIDENT, FINANCE — Title

ERIC HUSWICK — Print Name of Signatory

3/10/2025 — Date

Part I. AUTHORIZATION OF AGENT

Complete this section only if an agent, including an attorney, has been appointed to represent the Property Owner/Petitioner in proceedings before the State Board. List additional authorized agents on a separate sheet as needed, including printed name, contact information, signature, title and date.

I hereby authorize the agent whose name and contact information appears below to file a petition to the Nevada State Board of Equalization and to contest the value and/or exemption established for the properties named in Part D(2) of this Petition. I further authorize the agent listed below to receive all notices and decision letters related thereto; and represent the Petitioner in all related hearings and matters including stipulations and withdrawals before the Nevada State Board of Equalization. This authorization is limited to the appeal of property valuation for the tax roll and fiscal year named in Part D(5) of this Petition.

Authorized Agent Contact Information:

NAME OF AUTHORIZED AGENT:			TITLE:		
AUTHORIZED AGENT COMPANY, IF APPLICABLE:			EMAIL ADDRESS:		
MAILING ADDRESS OF AUTHORIZED AGENT (STREET ADDRESS OR P O BOX)					
CITY	STATE	ZIP CODE	DAYTIME PHONE	ALTERNATE PHONE	FAX NUMBER

Authorized Agent must check each applicable statement and sign below.

☐ **I hereby accept appointment as the authorized agent of the Property Owner in proceedings before the County Board.**

☐ **I verify (or declare) under penalty of perjury under the laws of the State of Nevada that the foregoing and all information hereon, including any accompanying statements or documents, is true, correct, and complete to the best of my knowledge and belief; and I am the authorized agent with authority to petition the State Board subject to the requirements of NRS 361.362 and the limitations contained in the Agent Authorization Form to be separately submitted.**

▶ ______ Authorized Agent Signature

______ Title

______ Print Name of Signatory

______ Date

From:	Chris Clark
To:	State Board Equalization
Cc:	James Bergstrom
Subject:	Taxpayer Petition for Appeal
Date:	Monday, March 10, 2025 1:53:37 PM
Attachments:	image[redacted].png Townsite State[redacted]Appeal [redacted] Case 495 [redacted] signed.pdf

WARNING - This email originated from outside the State of Nevada. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good Afternoon,

Please see the attached Petition for Appeal from the Decision of the County Board of Equalization for Townsite Solar Arevon, LLC, for your records.

Thank you,

CHRISTOPHER CLARK
Manager, State and Local Tax

office (480) 879-3798

AREVON.

COUNTY RECORD

State Board of Equalization Records Request
Preference of Order

CLARK COUNTY BOARD OF EQUALIZATION

<u>GENERAL INDEX</u>

CBOE Case #:	**495**
SBOE Case #:	**25-139**
PPID:	**230123**
CBOE Hearing Date:	**February 26, 2025**
Petitioner:	**TOWNSITE SOLAR** **AREVON LLC**
Respondent:	**Clark County Assessor**

1. Clerk's Certification of Copy
2. Petition for Review of Assessed Valuation
3. Evidence of Mailing Notice of Hearing
4. Notice of Decision
5. Petitioner's Exhibits
6. Assessor's Exhibits
7. Audio and Video Evidence (will be transmitted separately)
8. Minutes (see pertinent pages dated February 26, 2025)

CERTIFICATION OF COPY

STATE OF NEVADA)
)§
COUNTY OF CLARK)

I, LYNN MARIE GOYA, the duly qualified and acting Clerk of Clark County, in the State of Nevada, and Ex-Officio Clerk of the Clark County Board of Equalization, do hereby certify that the foregoing is a true, full and correct copy of the original now on file and of record in this office:

CBOE Case #: **495**

Hearing Date: **February 26, 2025**

PPID: **230123**

Petitioner: **TOWNSITE SOLAR AREVON LLC**

UNITED STATES OF AMERICA OF THE SEAL COUNTY OF CLARK STATE OF NEVADA

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of Clark County at my office, Las Vegas, Nevada, May 22, 2025..

Lynn Marie Goya

Lynn Marie Goya, Clark County Clerk

APPEAL FORM # 25-00495

Clark County Board of Equalization

PETITION FOR REVIEW OF TAXABLE VALUATION

Submit this Petition Form no later than 5 p.m. of the date due. Most types of appeals must be filed no later than January 15th. If the appeal involves valuation of property escaping taxation, or a determination that agricultural property has been converted to a higher use, a different due date may apply.

Please Print or Type:

Part A. PROPERTY OWNER/PETITIONER INFORMATION*(Agents Information to be completed in Part H)*

NAME OF PROPERTY OWNER AS IT APPEARS ON THE TAX ROLL TOWNSITE SOLAR AREVON LLC				
NAME OF PETITIONER (IF DIFFERENT FROM PROPERTY OWNER)				TITLE
MAILING ADDRESS OF PETITIONER (STREET ADDRESS OR P.O BOX) 8800 N Gainey Center Dr., STE 100				EMAIL ADDRESS cclark@arevonenergy.com
CITY Scottsdale	STATE AZ	ZIP CODE 85258-2123	DAYTIME PHONE 480-879-3798	ALTERNATE PHONE / FAX NUMBER

Part B. PROPERTY OWNER ENTITY DESCRIPTION

Check organization type which best describes the Property Owner if an entity and not a natural person. Natural persons may skip Part B.

☐ Sole Proprietorship ☐ Trust ☐ Corporation
☒ Limited Liability Company (LLC) ☐ General or Limited Partnership ☐ Goverment or Govermental Agency
☐ Other, please describe:

The organization described above was formed under the laws of the State of Delaware

The organization described above is a non-profit organization ☐ Yes ☒ No

Part C. RELATIONSHIP OF PETITIONER IN PART C TO PROPERTY OWNER IN PART A

Check box which best describes the relationship of Petitioner to Property Owner: ☐ Additional information may be necessary. Please see Instructions.

☐ Self ☐ Trustee of Trust ☐ Employee of Property Owner
☐ Co-owner, Partner, Management Member ☐ Officer of Company
☒ Employee or Officer of Management Company
☐ Employee, Officer, or Owner of Lessee of leashold, possessory interest, or benefical interest in real property.
☐ Other, please describe:

Part D. PROPERTY IDENTIFICATION INFORMATION

1. Enter Physical Address of Property:

ADDRESS 13316	STREET/ROAD US HWY 95 S	CITY (IF APPLICABLE) BOULDER CITY	COUNTY
PURCHASE PRICE: 531,238,486		PURCHASE DATE: 12/23/2021	

2. Enter Applicable Assessor Parcel Number or Personal Property Account Number from assessment notice or tax bill:

ASSESSOR'S PARCEL NUMBER (APN)	ACCOUNT NUMBER 230123

3. Does this appeal involve multiple parcels? Yes ☐ No ☑ ***List multiple parcels on a separate, letter-sized sheet.***

If yes, enter number of parcels: | Multiple parcel list is attached.

Appeals must be single parcels unless multiple contiguous parcels act as a single unit.

4. Check Property Type: ☑

☐ Vacant Land ☐ Mobile Home (Not on foundation) ☐ Mining Property
☐ Residential Property ☐ Commerical Property ☐ Industrial Property
☐ Multi-Family Residential Property ☐ Agricultural Property ☑ Personal Property
☐ Possessory Interest in Real or Personal property ☐ Exemption

5. Check Year and Roll Type of Assessment being appealed:

☑ 21-22* Unsecured Roll

Part E. VALUE OF PROPERTY

Property Owner: What is the value you seek? Write N/A on each line for values which are not being appealed. See NRS 361.025 for the definition of Full Cash Value.

Property Type	Assessor's Taxable Value	Owner's Opionion of Value
Land		N/A
Buildings		N/A
Personal Property		375,214,698
Possessory interest in real property		N/A
Exempt Value		N/A
		N/A
Total	*504,676,562	375,214,698

CBOE APPEAL FORM - Approved by SBOE on 11/20/2015

COMPLETE BOTH PAGES OF THIS FORM

*FY and Values Modified for prior year appeals approved by Admin

APPEAL FORM # 25-00495

Part F. TYPE OF APPEAL

Check box which best describes the authority of the County Board to take jurisdiction to hear the appeal.

- ☒ NRS 361.357: The full cash value of my property is less than the computed taxable value of the property.
- ☐ NRS 361.356: My property is assessed at a higher value than another property that has an identical use and a comparable location to my property.
- ☐ NRS 361.355: My property is overvalued because other property within the county is undervalued or not assessed; and have attached the proof showing the owner, the location, the description and the taxable value of the undervalued property.
- ☐ NRS 361.155: I request a review of the Assessor's decision to deny my claim for exemption from property taxes.
- ☐ NRS 361A.280: The Assessor has determined my agricultural property has been converted to a higher use and that deferred taxes are now due.
- ☐ NRS 361.769: My property has been assessed as property escaping taxation for this year and/or prior years.

Part G. WRITE A STATEMENT DESCRIBING THE FACTS AND/OR REASONS FOR YOUR APPEAL, REQUEST FOR REVIEW OR COMPLAINT. (ATTACH A SEPARATE PAGE IF MORE ROOM IS NEEDED)

We are representing a 30% reduction because the reported costs should be reduced by the federal tax credits received.
Supported by the Nevada State Board of Equalization ruling in Humboldt County Assessor V Battle Mountain Solar Project,
LLC Case No. 22-130.

CERTIFICATION

I certify (or declare) under penalty of perjury under the laws of the State of Nevada that the foregoing and all information hereon, including any accompanying statements or documents, is true, correct, and complete to the best of my knowledge and belief; and that I am either (1) the person who owns or controls taxable property, or possesses in its entirety taxable property, or the lessee or user of a leasehold interest, possessory interest, beneficial interest or beneficial use, pursuant to NRS 361.334; or (2) I am a person employed by the Property Owner or an affiliate of the Property Owner and I am acting within the scope of my employment. If Part H below is completed, I further certify I have authorized the agent named therein to represent the Property Owner as stated and I have the authority to appoint the authorized agent named in Part H.

Eric Huswick

Owner/Petitioner Signature

Vice President, Finance

Title

Eric Huswick

Print Name of Owner/Petitioner

1/9/2025

Date

Part H. AUTHORIZATION OF AGENT

Complete this section only if an agent, including an attorney, has been appointed to represent the Property Owner/Petitioner in proceedings before the County Board. Read instructions for further information.

I hereby authorize the agent whose name and contact information appears below to file a petition to the Clark County Board of Equalization and to contest the value and/or exemption established for the properties named in Part D(2) of this Petition.

I further authorize the agent listed below to receive all notices and decision letters related thereto; and represent the Petitioner in all related hearings and matters including stipulations and withdrawals before the Clark County Board of Equalization. This authorization is limited to the appeal of property valuation for the tax roll and fiscal year named in Part D(5) of this Petition.

Authorized Agent Contact Information:

NAME OF AUTHORIZED AGENT:			*TITLE:*		
AUTHORIZED AGENT COMPANY, IF APPLICABLE:			*EMAIL ADDRESS:*		
MAILING ADDRESS OF AUTHORIZED AGENT (STREET ADDRESS OR P.O. BOX)					
CITY	STATE	ZIP CODE	DAYTIME PHONE	ALTERNATE PHONE	FAX NUMBER

I hereby accept appointment as the authorized agent of the Property Owner in proceedings before the County Board.

CERTIFICATION

Agent Signature required only if Petitioner did not sign certification and a separate Agent Authorization will be submitted.

I certify (or declare) under penalty of perjury under the laws of the State of Nevada that the foregoing and all information hereon, including any accompanying statements or documents, is true, correct, and complete to the best of my knowledge and belief; and I am the authorized agent with authority to petition the Clark County Board subject to the requirements of NRS 361.362 and NAC 361.TBD (7012) and the limitations contained in the Agent Authorization Form to be separately submitted

Authorized Agent Signature

Title

Print Name of Signatory

Date

☐ I hereby withdraw appeal to the Board of Equalization

Signature of Owner or Authorized Agent/Attorney

Date

Date: 02/26/2025

CLARK COUNTY BOARD OF EQUALIZATION NOTICE OF HEARING

This is your notification that your Petition for Review to the Clark County Board of Equalization for review of the assessed value has been placed on the Agenda for the meeting of:

Date:	**Wednesday, February 26, 2025**
Time:	**08:00 am**
Location:	**Commission Chambers**
	Clark County Goverment Center
	500 S Grand Central Pkwy, 1st Floor
Case Number:	**00495**
Primary APN/ PPID:	**230123**

We encourage you to arrive at the above hearing at the scheduled start time. Depending on the length of the agenda, your case may be heard anytime between the start time noted and the completion of the agenda.

YOUR HEARING DATE HAS BEEN SET, IT CANNOT BE CHANGED.

If you have signed a stipulation letter, you are not required to attend your scheduled hearing; however, stipulated values are subject to review and change by the Board of Equalization. Signed withdrawals are not subject to further action by the Board.

Assessor's data related to your case will be provided to you at the hearing or you may contact the Assessor's Office to check availability prior to the hearing. Please bring this notice in order to receive the documents.

Petitioners requiring a transcript of the hearing must provide and pay for a court reporter. A copy of such transcript must also be provided to the County Clerk and the Secretary of the State Board of Equalization.

The Assessor's Office is located at 500 S. Grand Central Parkway, 2nd Floor.
If you have any questions, please call 702-455-4997.

200 Lewis Avenue
P. O. Box 551604
Las Vegas, NV 89155-1604
702-671-0500 / 702-382-3611 Fax

Office of the County Clerk

Lynn Marie Goya
County Clerk
Commissioner of Civil Marriages

Carl Bates
Assistant County Clerk

495/02-26-25
TOWNSITE SOLAR
AREVON LLC
8800 N GAINEY CENTER DR # 100
8800 N GAINEY CENTER DR # 100
SCOTTSDALE AZ 85258-2123

March 06, 2025

Re: Petition No. 495

Assessment Year:	2024 - 2025
PPID:	230123
Multiple PPIDs:	No
Hearing Date:	February 26, 2025

This is to notify you that the Clark County Board of Equalization has made the following determination on the petition you have filed on the above-described property:

> **Accepted the Assessor's recommendation (to reduce the total taxable value from \$531,238,486 to \$504,676,562 for FY 2021/2022) as it does not exceed full cash value based on the information provided**

If you have any questions, please contact the Clark County Assessor's Office, 500 South Grand Central Parkway, Second Floor, Las Vegas, NV 89106 Phone: (702) 455-3882.

Sincerely,

Lynn Marie Goya

Lynn Marie Goya, Clark County Clerk

CLARK COUNTY
BOARD OF EQUALIZATION

Case # 495

Petitioner Information

Townsite Solar, LLC
Balance Sheet
As of December 31, 2021

Financial Row	Amount
ASSETS	
Current Assets	
Bank	
10000 - Cash and cash equivalents_Non-Restricted	
10500 - CEI VII	
10532 - CEIVII_Townsite Solar_SVB_Oper_1437	$273,970.66
Total - 10500 - CEI VII	**$273,970.66**
Total - 10000 - Cash and cash equivalents_Non-Restricted	**$273,970.66**
Total Bank	**$273,970.66**
Accounts Receivable	
12000 - Accounts Receivable	
12005 - PPA Receivables	$7,248,547.44
12011 - Accounts Receivable - General	$22,093,942.98
Total - 12000 - Accounts Receivable	**$29,342,490.42**
Total Accounts Receivable	**$29,342,490.42**
Other Current Asset	
13000 - Other Current Assets	
13300 - Prepaid Expenses	
13320 - Prepaid Site Lease	$3,929,150.85
Total - 13300 - Prepaid Expenses	**$3,929,150.85**
Total - 13000 - Other Current Assets	**$3,929,150.85**
Total Other Current Asset	**$3,929,150.85**
Total Current Assets	**$33,545,611.93**
Fixed Assets	
15000 - Fixed Assets	
15200 - Solar Energy Systems	
15205 - Solar Energy Systems - General	$370,178,599.43
Total - 15200 - Solar Energy Systems	**$370,178,599.43**
15305 - Battery Energy Systems	$161,010,865.74
17060 - Fixed Assets - Accumulated Depreciation	
17060 - Fixed Assets - Accumulated Depreciation	($277,527.57)
17061 - Fixed Assets - Accumulated Depreciation - Battery	($178,953.87)
Total - 17060 - Fixed Assets - Accumulated Depreciation	**($456,481.44)**
Total - 15000 - Fixed Assets	**$530,732,983.73**
Total Fixed Assets	**$530,732,983.73**
Other Assets	
17100 - Asset Retirement Obligation Asset	
17105 - Asset Retirement Obligation Asset - General	$4,483,612.88
17106 - Asset Retirement Obligation Asset - Battery	$47,619.77
Total - 17100 - Asset Retirement Obligation Asset	**$4,531,232.65**
Total Other Assets	**$4,531,232.65**
Total ASSETS	**$568,809,828.31**

Liabilities & Equity	
Current Liabilities	
Accounts Payable	
20000 - Accounts Payable	$4,527,367.94
Total Accounts Payable	**$4,527,367.94**
Other Current Liability	
21000 - Other Current Liabilities	
21005 - Other Current Liabilities - General	$14,962,310.93
21500 - Intercompany Payable	
21693 - Townsite Solar Parent HoldCo, LLC	($8,247,829.63)
Total - 21500 - Intercompany Payable	**($8,247,829.63)**
Total - 21000 - Other Current Liabilities	**$6,714,481.30**
Total Other Current Liability	**$6,714,481.30**
Total Current Liabilities	**$11,241,849.24**
Long Term Liabilities	
28000 - Other Long Term Liabilities	
28010 - Asset Retirement Obligation Liability	$4,513,036.59
28011 - Asset Retirement Obligation Liability - Battery	$47,932.27
28015 - Deferred Lease - Long Term	($566,719.85)
Total - 28000 - Other Long Term Liabilities	**$3,994,249.01**
Total Long Term Liabilities	**$3,994,249.01**
Equity	
32000 - Member's Equity	
32005 - Member's Contributions	$537,009,371.98
32020 - Income (Loss) Allocation	$16,564,358.08
Total - 32000 - Member's Equity	**$553,573,730.06**
Retained Earnings	($7,676,204.98)
Net Income	$7,676,204.98
Total Equity	**$553,573,730.06**
Total Liabilities & Equity	**$568,809,828.31**

Townsite Solar, LLC
Income Statement
January 1, 2021 - December 31, 2021

Financial Row	Amount
Ordinary Income/Expense	
Income	
40000 - Revenue	
40005 - PPA Revenue	$25,708,210.96
40010 - Merchant Revenue	$559,700.48
Total - 40000 - Revenue	**$26,267,911.44**
Total - Income	**$26,267,911.44**
Cost Of Sales	
50000 - Cost Of Operations	
50005 - Maintenance Agreement - Operations & Maintenance	$64,033.72
50030 - Taxes	$968.41
50075 - Operational Costs - Other	$50,706.02
50200 - Ground Lease	
50201 - Lease Expense - General	$1,796,206.92
50210 - Basic Term	$170,849.15
Total - 50200 - Ground Lease	**$1,967,056.07**
Total - 50000 - Cost Of Operations	**$2,082,764.22**
51000 - Cost of Goods Sold	
51003 - Purchases of Electricity for Resale	$15,986,616.08
Total - 51000 - Cost of Goods Sold	**$15,986,616.08**
Total - Cost Of Sales	**$18,069,380.30**
Gross Profit	**$8,198,531.14**
Expense	
60000 - General And Administrative Expenses	
60015 - Consulting	$5,112.50
60020 - Legal	$2,137.50
60035 - Bank Service Charges & Fees	$994.51
60050 - Business License And Permits	$2,684.00
Total - 60000 - General And Administrative Expenses	**$10,928.51**
70000 - Depreciation, Amortization And Accretion Expense	
70005 - Depreciation Expense	$456,481.44
70015 - Accretion Expense	$29,736.21
Total - 70000 - Depreciation, Amortization And Accretion Expense	**$486,217.65**
Total - Expense	**$497,146.16**
Net Ordinary Income	**$7,701,384.98**
Other Income and Expenses	
Other Expense	
90000 - Other Expense	
92000 - Income Tax Expense (Benefit)	
92010 - Income Tax Expense - State	$25,180.00
Total - 92000 - Income Tax Expense (Benefit)	**$25,180.00**
Total - 90000 - Other Expense	**$25,180.00**
Total - Other Expense	**$25,180.00**
Net Other Income	**($25,180.00)**
Net Income	**$7,676,204.98**

Townsite Solar, LLC
Balance Sheet
As of December 31, 2022

Financial Row	Amount
ASSETS	
Current Assets	
Bank	
10000 - Cash and cash equivalents_Non-Restricted	
10500 - CEI VII	
10532 - CEIVII_Townsite Solar_SVB_Oper_1437	$6,395,669.16
Total - 10500 - CEI VII	**$6,395,669.16**
Total - 10000 - Cash and cash equivalents_Non-Restricted	**$6,395,669.16**
Total Bank	**$6,395,669.16**
Accounts Receivable	
12000 - Accounts Receivable	
12005 - PPA Receivables	$7,051,833.46
12010 - RECs Receivables	$958,438.75
12011 - Accounts Receivable - General	$1,556,650.24
Total - 12000 - Accounts Receivable	**$9,566,922.45**
Total Accounts Receivable	**$9,566,922.45**
Other Current Asset	
13000 - Other Current Assets	
13300 - Prepaid Expenses	
13305 - Prepaid Expenses - General	$3,420,387.42
13310 - Prepaid Insurance	$124,697.02
13315 - Prepaid Taxes	$5,021.13
Total - 13300 - Prepaid Expenses	**$3,550,105.57**
Total - 13000 - Other Current Assets	**$3,550,105.57**
Total Other Current Asset	**$3,550,105.57**
Total Current Assets	**$19,512,697.18**
Fixed Assets	
15000 - Fixed Assets	
15200 - Solar Energy Systems	
15205 - Solar Energy Systems - General	$368,519,137.45
Total - 15200 - Solar Energy Systems	**$368,519,137.45**
15305 - Battery Energy Systems	$161,010,865.74
17060 - Fixed Assets - Accumulated Depreciation	
17060 - Fixed Assets - Accumulated Depreciation	($10,899,418.70)
17061 - Fixed Assets - Accumulated Depreciation - Battery	($8,222,930.45)
Total - 17060 - Fixed Assets - Accumulated Depreciation	**($19,122,349.15)**
Total - 15000 - Fixed Assets	**$510,407,654.04**
Total Fixed Assets	**$510,407,654.04**
Other Assets	
17100 - Asset Retirement Obligation Asset	
17105 - Asset Retirement Obligation Asset - General	$3,476,783.49
17106 - Asset Retirement Obligation Asset - Battery	$47,619.77
Total - 17100 - Asset Retirement Obligation Asset	**$3,524,403.26**
18300 - Other Non-Current Assets	
18316 - Operating Lease ROU Asset	$51,824,433.26
Total - 18300 - Other Non-Current Assets	**$51,824,433.26**
Total Other Assets	**$55,348,836.52**
Total ASSETS	**$585,269,187.74**

Liabilities & Equity	
Current Liabilities	
Accounts Payable	
20000 - Accounts Payable	$3,574,514.53
Total Accounts Payable	**$3,574,514.53**
Other Current Liability	
20100 - Accrued Expense	$6,096,089.24
21000 - Other Current Liabilities	
21305 - Operating Lease Liability - Current	$602,124.80
Total - 21000 - Other Current Liabilities	**$602,124.80**
Total Other Current Liability	**$6,698,214.04**
Total Current Liabilities	**$10,272,728.57**
Long Term Liabilities	
28000 - Other Long Term Liabilities	
28010 - Asset Retirement Obligation Liability	$3,782,658.13
28011 - Asset Retirement Obligation Liability - Battery	$51,369.83
28016 - Operating Lease Liability - Non-Current	$47,088,024.76
Total - 28000 - Other Long Term Liabilities	**$50,922,052.72**
Total Long Term Liabilities	**$50,922,052.72**
Equity	
32000 - Member's Equity	
32005 - Member's Contributions	$541,218,658.69
32010 - Member's Return of Capital	($11,808,584.89)
32015 - Member's Distributions	($18,756,375.40)
32020 - Income (Loss) Allocation	$13,420,708.05
Total - 32000 - Member's Equity	**$524,074,406.45**
Retained Earnings	$3,143,650.03
Net Income	($3,143,650.03)
Total Equity	**$524,074,406.45**
Total Liabilities & Equity	**$585,269,187.74**

Townsite Solar, LLC
Income Statement
January 1, 2022 - December 31, 2022

Financial Row	Amount
Ordinary Income/Expense	
Income	
40000 - Revenue	
40005 - PPA Revenue	$39,279,402.98
40006 - PPA Revenue - RA	$2,149,678.66
40010 - Merchant Revenue	$30,110,258.06
40020 - REC Revenue	$3,320,240.75
40022 - Ancillary Service Revenue	$19,495.62
Total - 40000 - Revenue	**$74,879,076.07**
Total - Income	**$74,879,076.07**
Cost Of Sales	
50000 - Cost Of Operations	
50005 - Maintenance Agreement - Operations & Maintenance	$769,696.45
50006 - Maintenance Agreement - Bess	$1,818,613.60
50010 - Maintenance Agreement - Additional O&M	$132,600.12
50015 - Maintenance Agreement - BOP	$31,576.70
50017 - Project Letter of Credit Fees	$367,151.81
50019 - Shared Facilities	$420,750.50
50020 - Utilities	$212.49
50022 - Regulatory Compliance	$58,274.17
50023 - Utilities - Telecommunications	$15,785.99
50030 - Taxes	$2,001,488.91
50035 - Insurance	$531,317.83
50045 - Asset Management Fee	$652,122.37
50065 - Power Factors	$18,532.87
50070 - REC Fees	$11,227.53
50075 - Operational Costs - Other	$49,777.54
50085 - Energy Management Agreement	$395,155.42
50200 - Ground Lease	
50201 - Lease Expense - General	$1,907,795.86
Total - 50200 - Ground Lease	**$1,907,795.86**
Total - 50000 - Cost Of Operations	**$9,182,080.16**
51000 - Cost of Goods Sold	
51003 - Purchases of Electricity for Resale	$47,565,218.80
51004 - Purchase of RA for Resale	$1,563,763.86
Total - 51000 - Cost of Goods Sold	**$49,128,982.66**
Total - Cost Of Sales	**$58,311,062.82**
Gross Profit	**$16,568,013.25**
Expense	
60000 - General And Administrative Expenses	
60010 - Audit	$107,475.00
60015 - Consulting	$64,690.36
60020 - Legal	$415,707.67
60025 - Tax Compliance	$6,375.00
60030 - Tax Consulting	$66,424.00
60035 - Bank Service Charges & Fees	$1,522.04
60040 - Charitable Contributions	$5,000.00
60050 - Business License And Permits	$1,995.01
60081 - Security Monitoring	$9,834.75
Total - 60000 - General And Administrative Expenses	**$679,023.83**
70000 - Depreciation, Amortization And Accretion Expense	
70005 - Depreciation Expense	$18,665,867.71
70015 - Accretion Expense	$279,888.49
Total - 70000 - Depreciation, Amortization And Accretion Expense	**$18,945,756.20**
Total - Expense	**$19,624,780.03**
Net Ordinary Income	**($3,056,766.78)**
Other Income and Expenses	
Other Income	
80000 - Other Income	
80030 - Liquidated damages	($69,629.15)
Total - 80000 - Other Income	**($69,629.15)**
Total - Other Income	**($69,629.15)**
Other Expense	
90000 - Other Expense	
91000 - Interest Expense	$1,211.62
92000 - Income Tax Expense (Benefit)	
92010 - Income Tax Expense - State	$12,590.00
92025 - Tax Penalties	$3,452.48
Total - 92000 - Income Tax Expense (Benefit)	**$16,042.48**
Total - 90000 - Other Expense	**$17,254.10**
Total - Other Expense	**$17,254.10**
Net Other Income	**($86,883.25)**
Net Income	**($3,143,650.03)**

Townsite Solar, LLC
Balance Sheet
As of December 31, 2023

Financial Row	Amount
ASSETS	
Current Assets	
Bank	
10000 - Cash and cash equivalents_Non-Restricted	
10500 - CEI VII	
11855 - CEIVII_Townsite Solar_BofA_Oper_8020	$5,010,958.29
Total - 10500 - CEI VII	**$5,010,958.29**
Total - 10000 - Cash and cash equivalents_Non-Restricted	**$5,010,958.29**
Total Bank	**$5,010,958.29**
Accounts Receivable	
12000 - Accounts Receivable	
12005 - PPA Receivables	$6,480,491.14
12010 - RECs Receivables	$408,960.00
Total - 12000 - Accounts Receivable	**$6,889,451.14**
Total Accounts Receivable	**$6,889,451.14**
Other Current Asset	
13000 - Other Current Assets	
13300 - Prepaid Expenses	
13305 - Prepaid Expenses - General	$3,283,780.58
13310 - Prepaid Insurance	$99,846.12
13315 - Prepaid Taxes	$2,440.26
Total - 13300 - Prepaid Expenses	**$3,386,066.96**
Total - 13000 - Other Current Assets	**$3,386,066.96**
Total Other Current Asset	**$3,386,066.96**
Total Current Assets	**$15,286,476.39**
Fixed Assets	
15000 - Fixed Assets	
15200 - Solar Energy Systems	
15205 - Solar Energy Systems - General	$368,519,137.45
Total - 15200 - Solar Energy Systems	**$368,519,137.45**
15305 - Battery Energy Systems	$161,010,865.74
17060 - Fixed Assets - Accumulated Depreciation	
17060 - Fixed Assets - Accumulated Depreciation	($21,318,099.35)
17061 - Fixed Assets - Accumulated Depreciation - Battery	($16,262,097.52)
Total - 17060 - Fixed Assets - Accumulated Depreciation	**($37,580,196.87)**
Total - 15000 - Fixed Assets	**$491,949,806.32**
16000 - Inventory	
16001 - Modules	$223,089.58
Total - 16000 - Inventory	**$223,089.58**
Total Fixed Assets	**$492,172,895.90**
Other Assets	
17100 - Asset Retirement Obligation Asset	
17105 - Asset Retirement Obligation Asset - General	$3,476,783.49
17106 - Asset Retirement Obligation Asset - Battery	$47,619.77
17110 - Asset Retirement Obligation Asset - Accumulated Amortizati	($201,804.79)
17113 - Asset Retirement Obligation Asset – Accum. Amort. – Batte	($4,809.47)
Total - 17100 - Asset Retirement Obligation Asset	**$3,317,789.00**
18300 - Other Non-Current Assets	
18316 - Operating Lease ROU Asset	$50,872,318.08
Total - 18300 - Other Non-Current Assets	**$50,872,318.08**
Total Other Assets	**$54,190,107.08**
Total ASSETS	**$561,649,479.37**

Liabilities & Equity	
Current Liabilities	
Accounts Payable	
20000 - Accounts Payable	$2,192,658.07
Total Accounts Payable	**$2,192,658.07**
Other Current Liability	
20100 - Accrued Expense	$7,658,955.91
21000 - Other Current Liabilities	
21305 - Operating Lease Liability - Current	$626,111.46
21500 - Intercompany Payable	
21626 - Townsite Solar CEI, LLC	($242,355.31)
Total - 21500 - Intercompany Payable	**($242,355.31)**
Total - 21000 - Other Current Liabilities	**$383,756.15**
Total Other Current Liability	**$8,042,712.06**
Total Current Liabilities	**$10,235,370.13**
Long Term Liabilities	
28000 - Other Long Term Liabilities	
28010 - Asset Retirement Obligation Liability	$4,080,542.41
28011 - Asset Retirement Obligation Liability - Battery	$55,415.15
28016 - Operating Lease Liability - Non-Current	$46,461,913.27
Total - 28000 - Other Long Term Liabilities	**$50,597,870.83**
Total Long Term Liabilities	**$50,597,870.83**
Equity	
32000 - Member's Equity	
32005 - Member's Contributions	$541,218,658.69
32010 - Member's Return of Capital	($11,808,584.89)
32015 - Member's Distributions	($36,655,771.55)
32020 - Income (Loss) Allocation	$8,061,936.16
Total - 32000 - Member's Equity	**$500,816,238.41**
Retained Earnings	$5,358,771.89
Net Income	($5,358,771.89)
Total Equity	**$500,816,238.41**
Total Liabilities & Equity	**$561,649,479.37**

Townsite Solar, LLC
Income Statement
January 1, 2023 - December 31, 2023

Financial Row	Amount
Ordinary Income/Expense	
Income	
40000 - Revenue	
40005 - PPA Revenue	$40,148,261.43
40006 - PPA Revenue - RA	$3,666,710.00
40010 - Merchant Revenue	$2,643,001.51
40020 - REC Revenue	$5,330,736.25
40180 - Revenue - Liquidated damages	$80,081.80
Total - 40000 - Revenue	**$51,868,790.99**
Total - Income	**$51,868,790.99**
Cost Of Sales	
50000 - Cost Of Operations	
50005 - Maintenance Agreement - Operations & Maintenance	$788,871.16
50006 - Maintenance Agreement - Bess	$1,333,664.10
50010 - Maintenance Agreement - Additional O&M	$63,925.56
50015 - Maintenance Agreement - BOP	$14,409.65
50017 - Project Letter of Credit Fees	$824,588.46
50019 - Shared Facilities	$386,313.54
50020 - Utilities	$287.82
50021 - Road/Ground Maintenance	$22,000.00
50022 - Regulatory Compliance	$73,615.00
50023 - Utilities - Telecommunications	$70,945.52
50030 - Taxes	$1,995,267.72
50035 - Insurance	$643,186.26
50045 - Asset Management Fee	$402,634.80
50050 - Spare Parts	$168,353.36
50065 - Power Factors	$59,348.72
50070 - REC Fees	$11,858.35
50075 - Operational Costs - Other	$118,174.98
50085 - Energy Management Agreement	$459,750.39
50200 - Ground Lease	
50201 - Lease Expense - General	$1,907,795.77
Total - 50200 - Ground Lease	**$1,907,795.77**
Total - 50000 - Cost Of Operations	**$9,344,991.16**
51000 - Cost of Goods Sold	
51003 - Purchases of Electricity for Resale	$28,610,730.09
Total - 51000 - Cost of Goods Sold	**$28,610,730.09**
Total - Cost Of Sales	**$37,955,721.25**
Gross Profit	**$13,913,069.74**
Expense	
60000 - General And Administrative Expenses	
60015 - Consulting	$18,750.00
60020 - Legal	$261,455.71
60050 - Business License And Permits	$1,396.00
60081 - Security Monitoring	$9,243.75
Total - 60000 - General And Administrative Expenses	**$290,845.46**
70000 - Depreciation, Amortization And Accretion Expense	
70005 - Depreciation Expense	$18,664,461.98
70015 - Accretion Expense	$301,929.60
Total - 70000 - Depreciation, Amortization And Accretion Expense	**$18,966,391.58**
Total - Expense	**$19,257,237.04**
Net Ordinary Income	**($5,344,167.30)**
Other Income and Expenses	
Other Income	
80000 - Other Income	
80001 - Other Income - General	$10,002.72
80005 - Interest Income	$32,240.94
Total - 80000 - Other Income	**$42,243.66**
Total - Other Income	**$42,243.66**
Other Expense	
90000 - Other Expense	
90040 - Liquidated damages	$45,087.32
92000 - Income Tax Expense (Benefit)	
92010 - Income Tax Expense - State	$11,760.93
Total - 92000 - Income Tax Expense (Benefit)	**$11,760.93**
Total - 90000 - Other Expense	**$56,848.25**
Total - Other Expense	**$56,848.25**
Net Other Income	**($14,604.59)**
Net Income	**($5,358,771.89)**

CLARK COUNTY
BOARD OF EQUALIZATION

Case # 495

Assessor Information

Case Summary
00495

Owner:	TOWNSITE SOLAR	Parcel Number:	230123
Mailing Address:	8800 N GAINEY CENTER DR # 100	Appeal #:	00495
		Fiscal Year #:	2024-2025 Unsecured
	SCOTTSDALE AZ 85258-2123	BOE Date #:	02/26/2025 08:00 am Commission Chambers
		Appraiser:	Amy Mills
		Land Use Code:	0
		Neighborhood Code:	0
Situs:	13316 US HWY 95 S BOULDER CITY	Total Acres:	0.0000
Legal Description:			

Totals for all Parcels						
	2023-2024		2024-2025		2025-2026	
	Assessed	Taxable	Assessed	Taxable	Assessed	Taxable
Land Value	0	0	0	0	0	0
Improvement Value	0	0	0	0	0	0
Supplemental Value	0	0	0	0	0	0
Total	0	0	0	0	0	0

CLARK COUNTY
BOARD OF EQUALIZATION

ASSESSOR RECOMMENDS HOLDING
CURRENT TAXABLE VALUE
PENDING ANALYSIS TO FOLLOW

ADDENDUM TO FOLLOW

CLARK COUNTY
BOARD OF EQUALIZATION

Case # 495

Miscellaneous Information

OFFICE OF THE
COUNTY ASSESSOR

BRIANA JOHNSON
Clark County Assessor
(702) 455-3882 • Fax: (702) 455-0018
www.clarkcountynv.gov/assessor

Mary Ann Weidner, Deputy Director of Assessment Services

01/09/2025

Case Number: **495**
Parcel/PPID Number: **230123**

TOWNSITE SOLAR
C/O AREVON C/O J BERGSTROM
8800 N GAINEY CENTER DR # 100
SCOTTSDALE AZ 85258-2123

Dear Sir or Madam:

We have received your **Petition for Review to the Clark County Board of Equalization**. If you have additional information relevant to your case that you would like to submit for review, please provide it to our office as soon as possible. In order for your information to be included in the printed copy of your case, **it must be submitted at least seven days prior to your scheduled hearing date**. If you have to present additional information on the day of your hearing, **you must provide ten copies to the board**.

You will be notified of your hearing date by email.
1) **Email**. All correspondence will be sent to the email provided on the appeal form unless otherwise specified. To change your noticing email:

- Email your request to boe@ClarkCountyNV.gov
- Enter your Case # first and then “BOE Hearing Notification” in the subject line.
- In the body of the email, provide your case number, address, phone number and parcel number.

2) **Certified letter**. If no email is provided, you will receive notification by certified letter.

Your hearing will be scheduled between now and the end of February. You should attend the hearing and be prepared to discuss the taxable value of your property before the Board. For additional information regarding the appeal process and electronic hearing notification, please refer to the appeal instructions provided with your appeal form.

Our appraisal staff will prepare and submit to the Board a case with information which describes our position regarding your property valuation. This case information will be provided to you at the hearing, or you may contact our office to check availability prior to the hearing. Please contact our office if you have any questions in this regard.

Eric Huswick

Greater Phoenix Area · Contact Info

840 followers · 500+ connections

See your mutual connections

Join to view profile

Message

Arevon Energy, Inc.

University of Denver

About

BA accounting and Masters of taxation with 9+ years of experience in taxation, including... see more

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CLARK COUNTY
BOARD OF EQUALIZATION

Case # 495

Addendum

Case Summary
00495

Owner:	TOWNSITE SOLAR	Parcel Number:	230123
Mailing Address:	8800 N GAINEY CENTER DR # 100	Appeal #:	00495
		Fiscal Year #:	2024-2025 Unsecured
	SCOTTSDALE AZ 85258-2123	BOE Date #:	02/26/2025 08:00 am Commission Chambers
		Appraiser:	Amy Mills
		Land Use Code:	0
		Neighborhood Code:	0
Situs:	13316 US HWY 95 S BOULDER CITY	Total Acres:	0.0000
Legal Description:			

Totals for all Parcels						
	2023-2024		2024-2025		2025-2026	
	Assessed	Taxable	Assessed	Taxable	Assessed	Taxable
Land Value	0	0	0	0	0	0
Improvement Value	0	0	0	0	0	0
Supplemental Value	0	0	0	0	0	0
Total	0	0	0	0	0	0

APPEAL FORM # 25-00495

Clark County Board of Equalization

PETITION FOR REVIEW OF TAXABLE VALUATION

Submit this Petition Form no later than 5 p.m. of the date due. Most types of appeals must be filed no later than January 15th. If the appeal involves valuation of property escaping taxation, or a determination that agricultural property has been converted to a higher use, a different due date may apply.

Please Print or Type:

Part A. PROPERTY OWNER/PETITIONER INFORMATION *(Agents Information to be completed in Part H)*

NAME OF PROPERTY OWNER AS IT APPEARS ON THE TAX ROLL TOWNSITE SOLAR AREVON LLC					
NAME OF PETITIONER (IF DIFFERENT FROM PROPERTY OWNER)				*TITLE*	
MAILING ADDRESS OF PETITIONER (STREET ADDRESS OR P.O BOX) 8800 N Gainey Center Dr., STE 100				*EMAIL ADDRESS* cclark@arevonenergy.com	
CITY Scottsdale	STATE AZ	ZIP CODE 85258-2123	DAYTIME PHONE 480-879-3798	ALTERNATE PHONE	FAX NUMBER

Part B. PROPERTY OWNER ENTITY DESCRIPTION

Check organization type which best describes the Property Owner if an entity and not a natural person. Natural persons may skip Part B.

- ☐ Sole Proprietorship
- ☐ Trust
- ☐ Corporation
- ☒ Limited Liability Company (LLC)
- ☐ General or Limited Partnership
- ☐ Goverment or Govermental Agency
- ☐ Other, please describe:

The organization described above was formed under the laws of the State of Delaware

The organization described above is a non-profit organization ☐ Yes ☒ No

Part C. RELATIONSHIP OF PETITIONER IN PART C TO PROPERTY OWNER IN PART A

Check box which best describes the relationship of Petitioner to Property Owner: ☐ *Additional information may be necessary. Please see Instructions.*

- ☐ Self
- ☐ Trustee of Trust
- ☐ Employee of Property Owner
- ☐ Co-owner, Partner, Management Member
- ☐ Officer of Company
- ☒ Employee or Officer of Management Company
- ☐ Employee, Officer, or Owner of Lessee of leashold, possessory interest, or benefical interest in real property.
- ☐ Other, please describe:

Part D. PROPERTY IDENTIFICATION INFORMATION

1. Enter Physical Address of Property:

ADDRESS 13316	*STREET/ROAD* US HWY 95 S	*CITY (IF APPLICABLE)* BOULDER CITY	*COUNTY*
PURCHASE PRICE: 531,238,486		*PURCHASE DATE:* 12/23/2021	

2. Enter Applicable Assessor Parcel Number or Personal Property Account Number from assessment notice or tax bill:

ASSESSOR'S PARCEL NUMBER (APN)	ACCOUNT NUMBER 230123

3. Does this appeal involve multiple parcels? Yes ☐ No ☑ ***List multiple parcels on a separate, letter-sized sheet.***

If yes, enter number of parcels:		Multiple parcel list is attached.
Appeals must be single parcels unless multiple contiguous parcels act as a single unit.		

4. Check Property Type: ☑

- ☐ Vacant Land
- ☐ Residential Property
- ☐ Multi-Family Residential Property
- ☐ Possessory Interest in Real or Personal property
- ☐ Mobile Home (Not on foundation)
- ☐ Commerical Property
- ☐ Agricultural Property
- ☐ Mining Property
- ☐ Industrial Property
- ☑ Personal Property
- ☐ Exemption

5. Check Year and Roll Type of Assessment being appealed:

☑ 21-22* Unsecured Roll

Part E. VALUE OF PROPERTY

Property Owner: What is the value you seek? Write N/A on each line for values which are not being appealed. See NRS 361.025 for the definition of Full Cash Value.

Property Type	Assessor's Taxable Value	Owner's Opionion of Value
Land		N/A
Buildings		N/A
Personal Property		375,214,698
Possessory interest in real property		N/A
Exempt Value		N/A
		N/A
Total	*504,676,562	375,214,698

CBOE APPEAL FORM - Approved by SBOE on 11/20/2015

COMPLETE BOTH PAGES OF THIS FORM

*FY and Values Modified for prior year appeals approved by Admin

APPEAL FORM # 25-00495

Part F. TYPE OF APPEAL

Check box which best describes the authority of the County Board to take jurisdiction to hear the appeal.

- [x] NRS 361.357: The full cash value of my property is less than the computed taxable value of the property.
- [ ] NRS 361.356: My property is assessed at a higher value than another property that has an identical use and a comparable location to my property.
- [ ] NRS 361.355: My property is overvalued because other property within the county is undervalued or not assessed; and have attached the proof showing the owner, the location, the description and the taxable value of the undervalued property.
- [ ] NRS 361.155: I request a review of the Assessor's decision to deny my claim for exemption from property taxes.
- [ ] NRS 361A.280: The Assessor has determined my agricultural property has been converted to a higher use and that deferred taxes are now due.
- [ ] NRS 361.769: My property has been assessed as property escaping taxation for this year and/or prior years.

Part G. WRITE A STATEMENT DESCRIBING THE FACTS AND/OR REASONS FOR YOUR APPEAL, REQUEST FOR REVIEW OR COMPLAINT. (ATTACH A SEPARATE PAGE IF MORE ROOM IS NEEDED)

We are representing a 30% reduction because the reported costs should be reduced by the federal tax credits received.
Supported by the Nevada State Board of Equalization ruling in Humboldt County Assessor V Battle Mountain Solar Project,
LLC Case No. 22-130.

CERTIFICATION

I certify (or declare) under penalty of perjury under the laws of the State of Nevada that the foregoing and all information hereon, including any accompanying statements or documents, is true, correct, and complete to the best of my knowledge and belief; and that I am either (1) the person who owns or controls taxable property, or possesses in its entirety taxable property, or the lessee or user of a leasehold interest, possessory interest, beneficial interest or beneficial use, pursuant to NRS 361.334; or (2) I am a person employed by the Property Owner or an affiliate of the Property Owner and I am acting within the scope of my employment. If Part H below is completed, I further certify I have authorized the agent named therein to represent the Property Owner as stated and I have the authority to appoint the authorized agent named in Part H.

Eric Huswick

Owner/Petitioner Signature

Vice President, Finance

Title

Eric Huswick

Print Name of Owner/Petitioner

1/9/2025

Date

Part H. AUTHORIZATION OF AGENT

Complete this section only if an agent, including an attorney, has been appointed to represent the Property Owner/Petitioner in proceedings before the County Board. Read instructions for further information.

I hereby authorize the agent whose name and contact information appears below to file a petition to the Clark County Board of Equalization and to contest the value and/or exemption established for the properties named in Part D(2) of this Petition.

I further authorize the agent listed below to receive all notices and decision letters related thereto; and represent the Petitioner in all related hearings and matters including stipulations and withdrawals before the Clark County Board of Equalization. This authorization is limited to the appeal of property valuation for the tax roll and fiscal year named in Part D(5) of this Petition.

Authorized Agent Contact Information:

NAME OF AUTHORIZED AGENT:			TITLE:		
AUTHORIZED AGENT COMPANY, IF APPLICABLE:			EMAIL ADDRESS:		
MAILING ADDRESS OF AUTHORIZED AGENT (STREET ADDRESS OR P.O. BOX)					
CITY	STATE	ZIP CODE	DAYTIME PHONE	ALTERNATE PHONE	FAX NUMBER

I hereby accept appointment as the authorized agent of the Property Owner in proceedings before the County Board.

CERTIFICATION

Agent Signature required only if Petitioner did not sign certification and a separate Agent Authorization will be submitted.

I certify (or declare) under penalty of perjury under the laws of the State of Nevada that the foregoing and all information hereon, including any accompanying statements or documents, is true, correct, and complete to the best of my knowledge and belief; and I am the authorized agent with authority to petition the Clark County Board subject to the requirements of NRS 361.362 and NAC 361.TBD (7012) and the limitations contained in the Agent Authorization Form to be separately submitted

Authorized Agent Signature

Title

Print Name of Signatory

Date

- [ ] I hereby withdraw appeal to the Board of Equalization

Signature of Owner or Authorized Agent/Attorney

Date

CLARK COUNTY
BOARD OF EQUALIZATION

Case # 495

Assessor Information

PERSONAL PROPERTY DECLARATION & ASSET LISTING

Business Name Townsite Solar, LLC

Mailing Address 8800 N. Gainy Centery Drive Ste 100
Scottsdale, AZ 85258

Location Address 13316 Highway 95 South
Boulder City, NV 89005

Phone Number
Website Address

Legal/Corporation Name Townsite Solar, LLC
Contact Name James Bergstrom
Contact Phone 480-653-8450
Email Address jbergstrom@arevonenergy.com
NAICS 221114

QUESTIONS:

1. Is the business information printed above correct? (Type YES or NO) YES

(If "NO" please type corrections over the existing information)
The business information above should be identical to the information printed on the declaration you received in the mail.

2. What is the NAICS or type of business? 221114

3. Check and complete any of the following that apply:

		Effective date	New name, entity or owner
New business			
Business reorganized			
Business sold			
Out of business			

4. Which information are you providing? (check one)

X	Complete list
	Additions & Deletions only

(indicate add or delete in first column)

	Asset ID # or Serial # (optional)	Description	Year Acquired	Acquisition Cost	Dept Code	Notes		
		Solar system	2021	$ 438,245,206.50				
		BESS	2021	$ 81,834,085.52				
		BESS Software	2021	$ 11,159,193.48				
				$ 531,238,485.50				

Valuation Details

FY 21/22

Description	Year Acq	Acquisition Cost	Cost Index per pp Manual	RCN	% Good per PP Manual	Taxable	Obs Adj	Adj Taxable
Solar system	2021	438,245,207	1.00	438,245,207	100	438,245,207	0.95000000	416,332,947
BESS	2021	81,834,086	1.00	81,834,086	100	81,834,086	0.95000000	77,742,382
BESS Software	2021	11,159,193	1.00	11,159,193	100	11,159,193	0.95000000	10,601,233
		531,238,486		531,238,486		531,238,486		504,676,562

CLARK COUNTY
OFFICE OF THE DISTRICT ATTORNEY
Civil Division

STEVEN B. WOLFSON
District Attorney

500 S. Grand Central Pkwy, Suite 5075 • Las Vegas, NV 89155 • 702-455-4761 • Fax: 702-382-5178 • TTY and/or other relay services: 711

ALEXANDER CHEN *Assistant District Attorney* | ROBERT DASKAS *Assistant District Attorney* | BRIGID J. DUFFY *Assistant District Attorney* | KAREN S. CLIFFE *Assistant District Attorney* | LISA LOGSDON *County Counsel*

February 12, 2025
Via Email Only

David Denman
Clark County Assessor's Office
jde@ClarkCountyNV.gov

Re: Townsite Solar Arevon LLC
CBOE Case Number: 25-494 – FY22/23
CBOE Case Number: 25-495 – FY21/22

Dear Mr. Denman:

Questions and Brief Answers

(1) Does the State Board of Equalization's decision in Humboldt County v. Battle Mountain require the Clark County Assessor to provide a reduction of the valuation of solar facilities by thirty (30) percent due to federal investment tax credits?

No, a State Board opinion is only binding for the year and is not binding on any future County or State Boards of Equalization. NRS 361.345(1)(b).

(2) Does Nevada law allow a reduction in value due to federal investment tax credits received by the property owner?

No, there is no statutory authority to reduce a property's valuation by federal investment tax credits.

(3) Does Nevada law allow a property to take the federal investment tax credit and continue to receive the renewable energy tax abatement?

No, NRS 701A.370 which provides a 55% tax abatement for compliant renewable energy producers, does not allow additional exemptions/abatements. NRS 701A.370(1)(3).

Nevada law does not provide the statutory authority to reduce a property's valuation by federal investment tax credits, therefore, federal investment tax credit cannot be used to reduce the assessed and taxable valuation of real and/or personal property of a renewable energy facility without any evidence that the assessor's valuation exceeds full cash value. The reduction of assessed value due solely to federal investment tax credits arguably violates Nevada law if the property owner also receives a tax abatement authorized by NRS 701A for renewal energy project. In Nevada, the Legislature has provided for tax relief for renewable energy projects through a tax abatement process in NRS 701A rather than provide for a reduction in assessed value. NRS 701A.370 provides for a 55% percent reduction in real and personal property taxes for renewable energy facilities. NRS 701A.370(1)(c) prohibits such a reduction if the facility receives another abatement or exemption from property taxes. If a facility was permitted to use its federal investment tax credit as a basis for reducing its assessed and taxable value it is essentially receiving another abatement from property taxes, therefore, prohibiting the 55% reduction in taxes allowed in NRS 701A.370.

Opinion

In Nevada, the assessed value of personal property is determined by subtracting from the cost of replacement of the property all applicable depreciation and obsolescence. NRS 361.227(4). Here, the Assessor's office has valued the personal property of the Townsite Solar Arevon LLC ("Taxpayer") based on cost of replacement minus all applicable depreciation and obsolescence to arrive at a value for fiscal year 21/22 of $504,676,562 and fiscal year 22/23 $444,646,613. The Taxpayer has argued that based on a State Board of Equalization decision in 2022 regarding Humboldt County, the Assessor should reduce its valuation by 30% due to federal investment credits that the Taxpayer has allegedly received. The Taxpayer provided its opinion of value of $375,214,698 and a statement that its personal property valuation should be reduced by 30% because of the federal investment tax credits received. *See* Taxpayer's appeal form 25-00495. The Taxpayer provided no evidence to support a reduction in value.

Pursuant to NRS 361.227(5) in reviewing whether the Assessor's valuation exceeds full cash value or whether obsolescence is a factor in valuation the County Board of Equalization may consider: (a) comparative sales, based on actual prices paid in market transactions; (b) a summation of the estimated full cash value of the land and contributory value of the improvements; or (c) capitalization of the fair economic income expectancy or fair economic rent, or any analysis of the discounted cash flow. NRS 361.025 defines "full cash value" to be the most probable price which property would bring in a competitive and open market under all conditions requisite to a fair sale.

In Nevada, the definition of full cash value does not include any reduction for federal investment tax credits that the taxpayer has received.

Unlike in some states, like Arizona which has a statute (A.R.S. § 42-14155) that specifies that the taxable original cost of renewable energy and storage equipment should be reduced by the value of any applicable investment tax credit, Nevada does not have the same statutory authorization. Other jurisdictions have ruled that low-income housing tax credits do not reduce property tax valuations as they are intangible assets that do not directly contribute to the market value of housing projects. See *Huron Ridge LP v. Ypsilanti Tp.*, 275 Mich.App. 23 (2007). Also, the California Court of Appeals, in *May Department Stores v. Los Angeles County*, 196 Cal.App.3d 755 (1987), found that the federal investment tax credit for a department store should not be considered when determining the full cash value of the company's furniture and equipment.

The County Board of Equalization should not consider federal investment tax as the Legislature has not permitted such a reduction and such a reduction would be in violation of NRS 701A, which provides for a reduction in taxes paid by renewable energy facilities. In establishing a tax reduction for renewable energy facilities, the Legislature in NRS 701A.370(1)(a)(3) prohibited the 55% real and personal property tax reduction during any period of time in which the "facility" is receiving another abatement or exemption from property taxes imposed pursuant to NRS 361 except for the property tax cap provided for in NRS 361.4722.

If the federal investment tax credit is used to reduce the valuation of personal property owned by a facility receiving a tax abatement (i.e. tax reduction) pursuant to NRS 701A.370, then the reduction in the value of the real or personal property related to the federal investment tax credit is a per se abatement of property taxes imposed by NRS 361 and therefore the facility would be ineligible to also receive the tax reduction pursuant to NRS 701A.370. There is nothing in NRS 361, Nevada regulations or direction from the Nevada Tax Commission that allows a county assessor to consider federal investment tax credits received by an owner to reduce the valuation of personal property especially in light of the fact that a facility would be receiving a 55% reduction in personal property taxes pursuant to NRS 701A.370. The facility should not be permitted to essentially receive two tax abatements.

If a property owner was allowed to use a federal investment tax credit to reduce the valuation of property in Nevada which in turn reduces the taxes paid, then it could be argued that the taxpayer would be receiving "another abatement" from property taxes due to the reduction in property valuation as a result of a federal investment tax credit. Tax exemptions are strictly construed and one claiming the exemption must demonstrate clearly an intent to exempt and any reasonable doubt about applicability of exemption must be construed against the taxpayer. *Sierra Pacific Power Company v. Department of Taxation*, 96 Nev. 295, 298 (1980). Therefore, the consideration of federal investment tax credits to justify or support a reduction in the assessed and taxable value of personal property of a renewable energy facility is in violation of Nevada assessment laws and arguably violates NRS 701A.370, as a facility is not eligible to receive both reductions and under Nevada law as tax exemption statutes are strictly construed against the taxpayer.

Sincerely,

STEVEN B. WOLFSON
DISTRICT ATTORNEY

BY: Lisa Logsdon
LISA LOGSDON
County Counsel
Lisa.Logsdon@ClarkCountyDA.com

cc: Briana Johnson, County Assessor

Utility Scale Solar Business Path

Start the Timeline	6 Months	6 Months	3 Months	12 Months	12 Months	1 Month
Cummulative (Months)	6 Months	12 Months	15 Months	27 Months	39 Months	40 Months

Conceive and Plan the Development

Acquire the Power Purchase Agreement

Secure Funding

Acquire the Equipment (RCN)
(**Cost of Equipment** = Amount of Apples 🍎🍎🍎)

Install the Equipment

Turn it ON (Start of Yr 1)
Revenue Generated
Less: O&M Expenses
NOI / EBITDA (End of Yr 1)

Apply MACRS Depreciation
Federal Tax Liability of Business

Subtract Federal Investment Tax Credit (multiply Original Cost by 30%) from Federal Tax Liability of Business
(**Investment Tax Credit** = Amount of Bananas 🍌🍌🍌)
Reduced Federal Tax Liability of Business

Assessor's Notice of Value is Sent

Appelant Sends Appeal Claiming:
If we subtract the 🍌's from the 🍎's then there are less 🍎's

TAXABLE VALUE/FULL CASH VALUE - GOVERNING LAW

NRS 361.227 Determination of taxable value.

1. Any person determining the taxable value of real property shall appraise:

(a) The full cash value of:

(1) Vacant land by considering the uses to which it may lawfully be put, any legal or physical restrictions upon those uses, the character of the terrain, and the uses of other land in the vicinity.

(2) Improved land consistently with the use to which the improvements are being put.

(b) Any improvements made on the land by subtracting from the cost of replacement of the improvements all applicable depreciation and obsolescence. Depreciation of an improvement made on real property must be calculated at 1.5 percent of the cost of replacement for each year of adjusted actual age of the improvement, up to a maximum of 50 years.

2. The unit of appraisal must be a single parcel unless:

(a) The location of the improvements causes two or more parcels to function as a single parcel;

(b) The parcel is one of a group of contiguous parcels which qualifies for valuation as a subdivision pursuant to the regulations of the Nevada Tax Commission; or

(c) In the professional judgment of the person determining the taxable value, the parcel is one of a group of parcels which should be valued as a collective unit.

3. …

4. …

5. The computed taxable value of any property must not exceed its full cash value. Each person determining the taxable value of property shall reduce it if necessary to comply with this requirement. A person determining whether taxable value exceeds that full cash value or whether obsolescence is a factor in valuation may consider:

(a) Comparative sales, based on prices actually paid in market transactions.

(b) A summation of the estimated full cash value of the land and contributory value of the improvements.

(c) Capitalization of the fair economic income expectancy or fair economic rent, or an analysis of the discounted cash flow.

****

NAC 361.1177 (c) adopts by reference *Property Appraisal and Assessment Administration* as published by the International Association of Assessing Officers (IAAO).

Definition of Economic Rent from the *Glossary for Property Appraisal and Assessment* by IAAO:

> *Rent, Economic – (1) In appraisal, the annual rent that is justified for the property on the basis of a careful study of comparable properties in the area; market rent.*

****

NRS 361.345 Power of county board of equalization to change valuation of property; review of changes in valuation and estimation of certain property by county assessor; notice of addition to assessed valuation.

1. Except as otherwise provided in subsection 2, the county board of equalization may:

(a) Determine the valuation of any real or personal property placed on:

(1) The secured tax roll which was assessed by the county assessor; or

(2) The unsecured tax roll which was assessed by the county assessor on or after May 1 and on or before December 15; and

(b) Change and correct any valuation found to be incorrect either by adding thereto or by deducting therefrom such sum as is necessary to make it conform to the taxable value of the property assessed, whether that valuation was fixed by the owner or the county assessor. The county board of equalization may not reduce the assessment of the county assessor unless it is established by a preponderance of the evidence that the valuation established by the county assessor exceeds the full cash value of the property or is inequitable. A change so made is effective only for the fiscal year for which the assessment was made. The county assessor shall each year review all such changes made for the previous fiscal year and maintain or remove each change as circumstances warrant.

CLARK COUNTY
BOARD OF EQUALIZATION

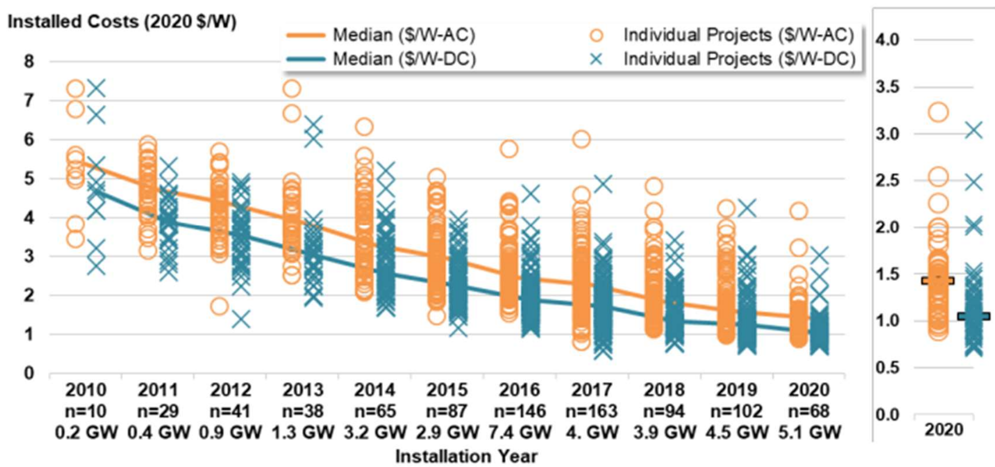
Case # 495

Miscellaneous Information

Obsolescence – Utility Scale Solar 2021-2022

Median installed costs of PV have fallen by 74% (or 12% annually) since 2010, to $\$1.42/W_{AC}$ ($\$1.05/W_{DC}$) in 2020

Sample: 848 projects totaling 34,020 MW_{AC}



The lowest 20th percentile of project costs fell from $\$1.3/W_{AC}$ ($\$1.0/W_{DC}$) in 2019 to $\$1.1/W_{AC}$ ($\$0.9/W_{DC}$) in 2020.

The lowest-cost project among the 68 data points in 2020 was $\$0.9/W_{AC}$ ($\$0.7/W_{DC}$).

Historical sample is robust (covering 99% of installed capacity through 2019). 2020 data covers 41% of new projects or 63% of new capacity.

This sample is backward-looking and does not reflect the costs of projects built in 2021/2022.

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Utility-Scale Solar, 2021 Edition
http://utilityscalesolar.lbl.gov

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Installed Costs 2020 $\$/W_{AC}$ from Berkeley Labs

Year	Median Installed Costs $\$/W_{AC}$	Cost Decline (%)	Market Based Installed Cost (% Good)
2026			
2025			
2024			
2023			
2022			
2021	$1.17	0.00	1.00
2020	$1.42	0.18	0.82
2019	$1.58	0.26	0.74
2018	$1.84	0.36	0.64
2017	$2.27	0.48	0.52
2016	$2.45	0.52	0.48
2015	$2.96	0.60	0.40
2014	$3.30	0.65	0.35
2013	$3.89	0.70	0.30
2012	$4.37	0.73	0.27
2011	$4.72	0.75	0.25
2010	$5.38	0.78	0.22
2009	$5.19	0.77	0.23
2008	$4.82	0.76	0.24
2007	$10.46	0.89	0.11
2006			
2005			

Red = Estimated

30-Year Life Table based % Good vs Market Based Installed Cost | Predictive Analys

	Chart 1		Chart 2	
Year Built	Statutory 21-22 Personal Property Manual 30-Year Life Table Percent Good	Market Based Installed Cost (% Good)	Statutory 21-22 Personal Property Manual 30-Year Life Table Percent Good	Trend Line Predicted Market Based Installed Cost (% Good)
2026				
2025				
2024				
2023				
2022				
2021	1.00	1.00	1.00	0.95
2020	0.93	0.82	0.93	0.83
2019	0.87	0.74	0.87	0.72
2018	0.81	0.64	0.81	0.63
2017	0.76	0.52	0.76	0.54
2016	0.71	0.48	0.71	0.47
2015	0.66	0.40	0.66	0.40
2014	0.62	0.35	0.62	0.35
2013	0.58	0.30	0.58	0.30
2012	0.54	0.27	0.54	0.27
2011	0.50	0.25	0.50	0.24
2010	0.47	0.22	0.47	0.23
2009	0.44	0.23	0.44	0.22
2008	0.41	0.24	0.41	0.22
2007	0.38	0.11	0.38	0.24
2006				
2005				

Chart 1

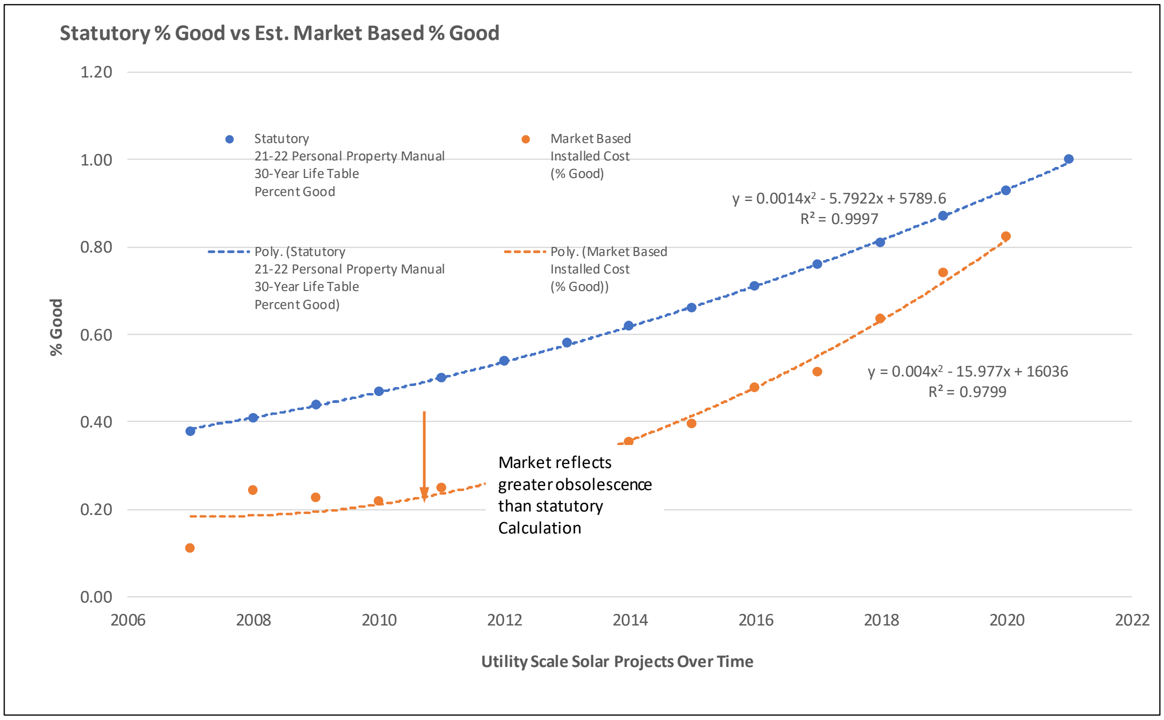
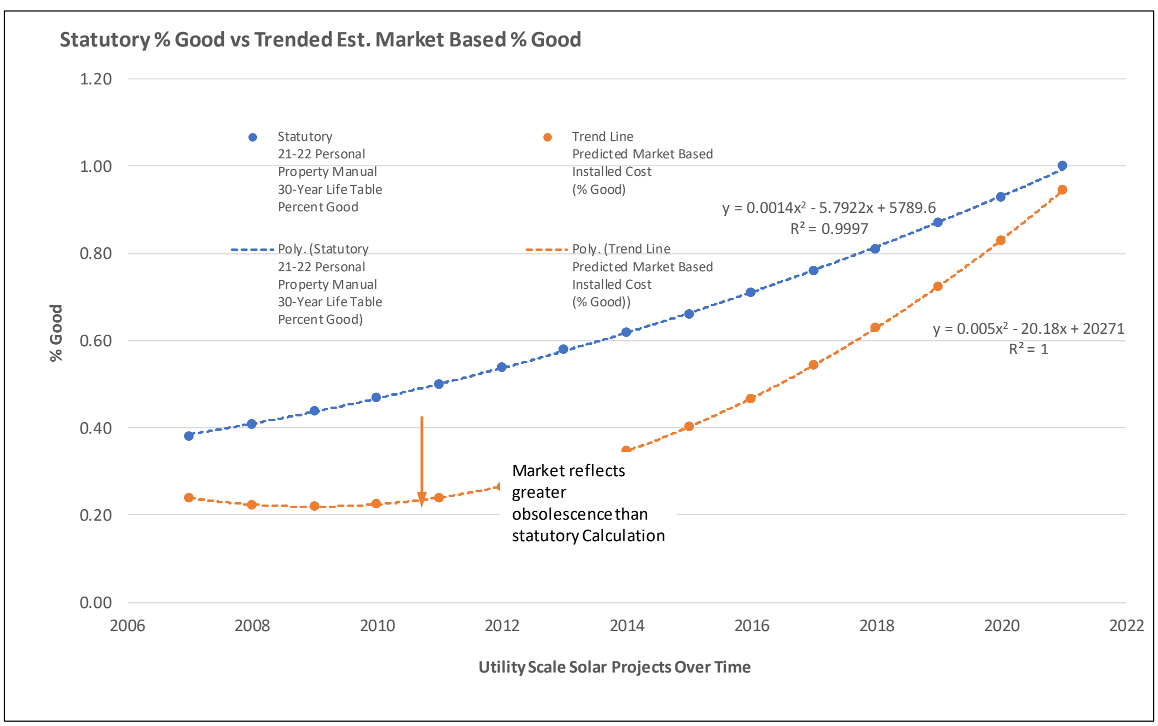


Chart 2



Final Recommendation for an Obsolescence Adjustment (With Example for $1,000 in Historical Cost)

Year Built	Historical or Declared Cost	Statutory 21-22 Personal Property Manual 30-Year Life Table Cost Index	RCN	Statutory 21-22 Personal Property Manual 30-Year Life Table Percent Good	Statutory Taxable Value
2026					
2025					
2024					
2023					
2022					
2021		1.00		100.00	
2020		1.00		93.00	
2019	$1,000.00	1.03	$1,030.00	87.00	$896.10
2018		1.06		81.00	
2017		1.08		76.00	
2016		1.10		71.00	
2015		1.11		66.00	
2014		1.12		62.00	
2013		1.13		58.00	
2012		1.15		54.00	
2011		1.18		50.00	
2010		1.20		47.00	
2009		1.21		44.00	
2008		1.24		41.00	
2007		1.28		38.00	
2006					
2005					

Year Built	Historical or Declared Cost	Market Based Installed Cost Multiplier (% Good)	Adjusted Current Cost	Statutory 21-22 Personal Property Manual 30-Year Life Table Percent Good	Market Taxable Value
2026					
2025					
2024					
2023					
2022					
2021		0.95		100.00	
2020		0.83		93.00	
2019	$1,000.00	0.72	$720.00	87.00	$626.40
2018		0.63		81.00	
2017		0.54		76.00	
2016		0.47		71.00	
2015		0.40		66.00	
2014		0.35		62.00	
2013		0.30		58.00	
2012		0.27		54.00	
2011		0.24		50.00	
2010		0.23		47.00	
2009		0.22		44.00	
2008		0.22		41.00	
2007		0.24		38.00	
2006					
2005					

Market Taxable Value	$626.40
Minus: Statutory Taxable Value	$896.10
Recommended Obsolescence	-$269.70
as a Percentage Deduction	**0.30097087**
or as a Factor	**0.69902913**

Utility-Scale Solar, 2021 Edition

Empirical Trends in Deployment, Technology, Cost, Performance, PPA Pricing, and Value in the United States

Mark Bolinger[1], Joachim Seel[1],
Cody Warner, and Dana Robson

Lawrence Berkeley National Laboratory
[1]Corresponding authors

October 2021

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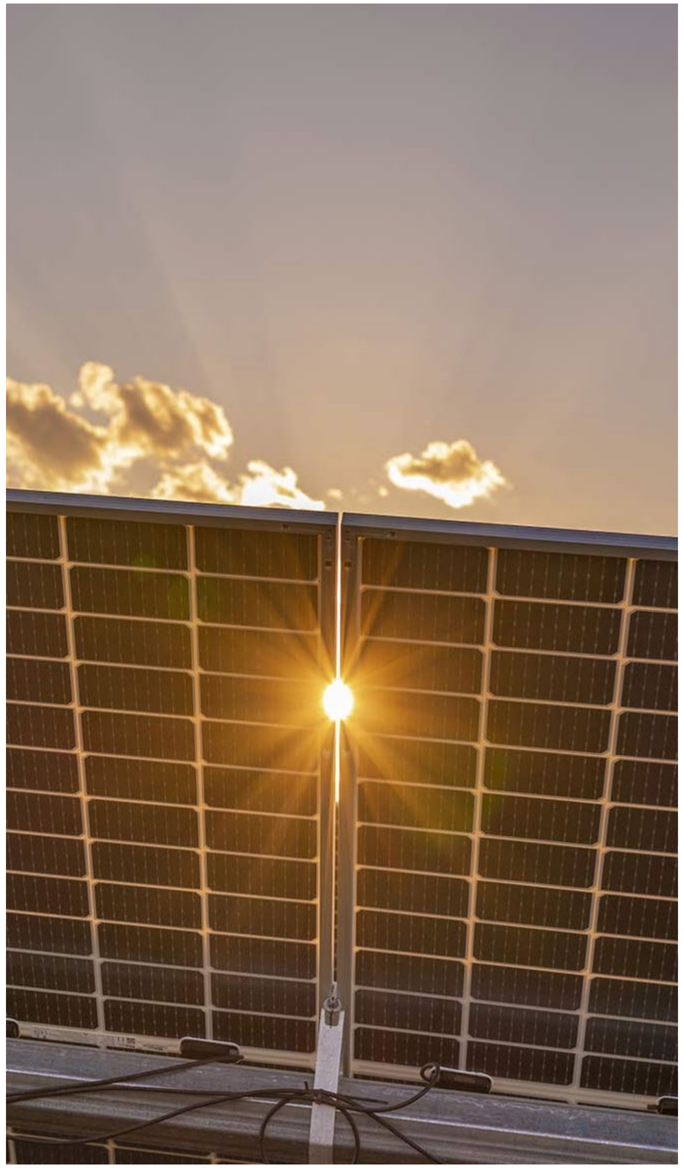
This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under Solar Energy Technologies Office (SETO) Agreement Number 34158 and Contract No. DE-AC02-05CH11231.

Utility-Scale Solar, 2021 Edition



Disclaimer

Copyright Notice

Acknowledgements

For their support of this project, the authors thank Ammar Qusaibaty, Michele Boyd, and Becca Jones-Albertus of the U.S. Department of Energy Solar Energy Technologies Office. And finally, the authors thank the many individuals from utilities, state agencies, and other organizations who contributed data to this report and who, in many cases, responded to numerous inquiries and requests. Without the contributions of these individuals and organizations, this report would not be possible.

Photo credit:
Enel's 497 MW_{DC} Roadrunner Solar Project
with bifacial modules

Utility-Scale Solar, 2021 Edition

Purpose and Scope:

- Summarize publicly available data on key trends in U.S. utility-scale solar sector
- Focus on ground-mounted projects >5 MW_{AC}
  - There are separate DOE-funded data collection efforts on distributed PV
- Focus on historical data, emphasizing the most-recent full calendar year

Data and Methods:

- See summary at end of PowerPoint deck

Funding:

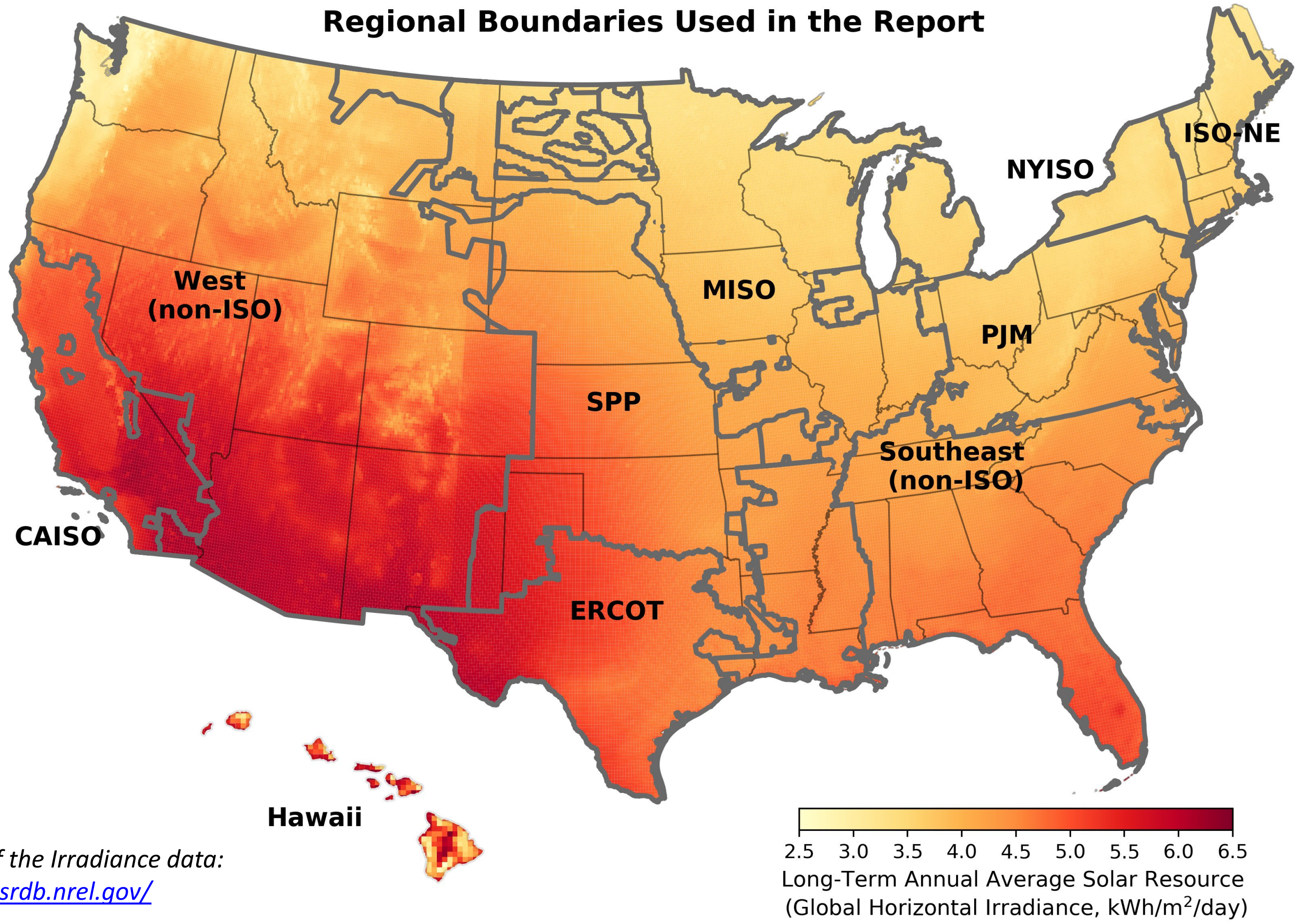
- U.S. Department of Energy's Solar Energy Technologies Office

Products and Availability:

- This report deck is complemented by an Excel data file, a written technical brief, and interactive visualizations
- All products are available at: utilityscalesolar.lbl.gov

Report Contents

Regional boundaries applied in this analysis include the seven independent system operators (ISO) and two non-ISO regions



Source of the Irradiance data:
https://nsrdb.nrel.gov/

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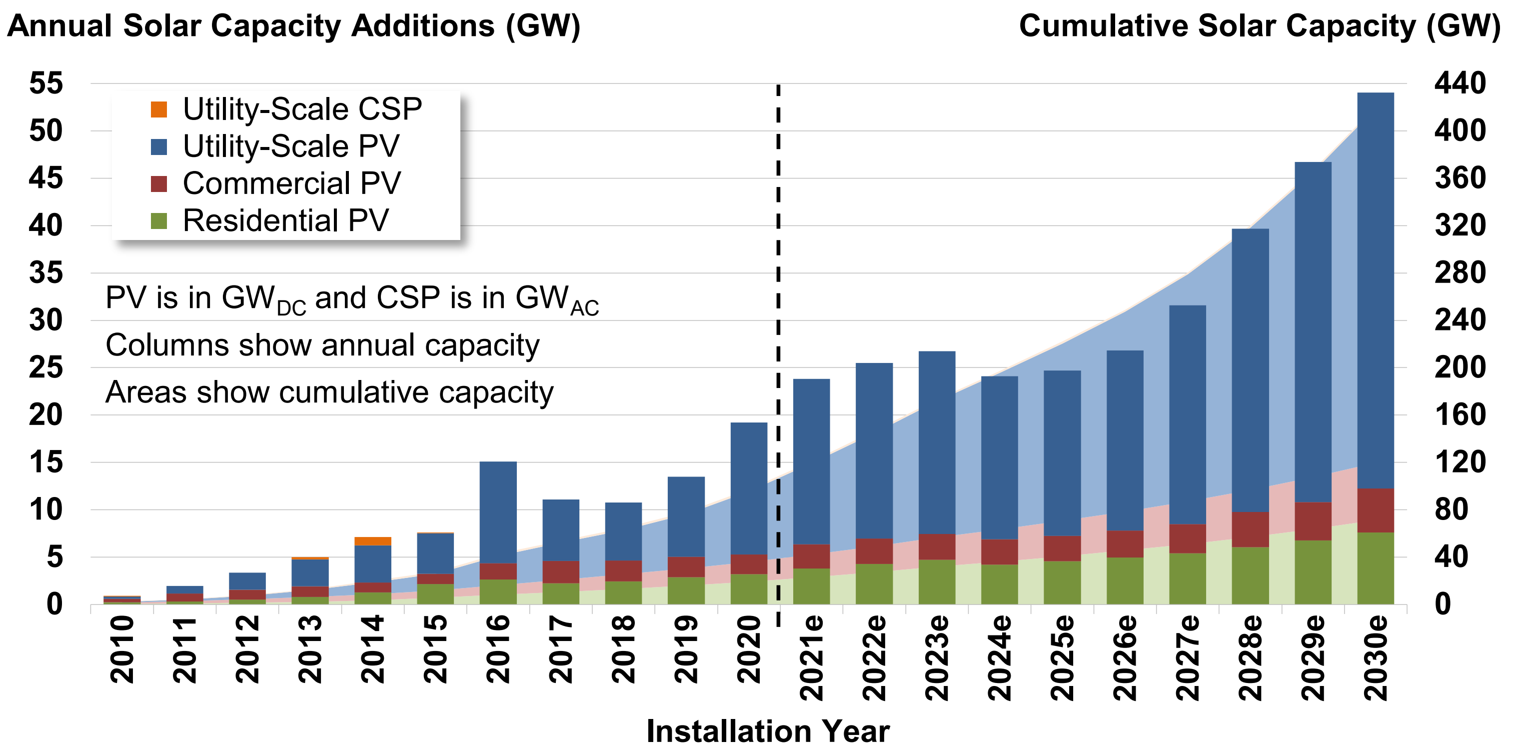
Deployment and Technology Trends

Utility-scale projects have the greatest capacity share in the U.S. solar market



Sources: *Wood Mackenzie/SEIA Solar Market Insight Reports, Berkeley Lab*

Wood Mackenzie and SEIA report that the utility-scale sector added 14 GW_{DC} or **73% of all new solar** capacity of 2020. It was the year with the greatest utility-scale solar capacity expansion in the United States so far, representing a year-over-year growth of 65%.

Utility-scale solar accounts for **61% of cumulative solar** capacity.

Our data analysis focuses on a subset of this sample—all projects larger than $5MW_{AC}$ that were completed by the end of 2020:

– **2019**: 108 new projects totaling 6.1 GW_{DC} or 4.6 GW_{AC}

– **2020**: 161 new projects totaling 12.8 GW_{DC} or 9.6 GW_{AC}

We define “utility-scale” as any ground-mounted project that is larger than 5 MW_{AC}

Smaller systems are analyzed in LBNL’s *“Tracking the Sun”* series (trackingthesun.lbl.gov)

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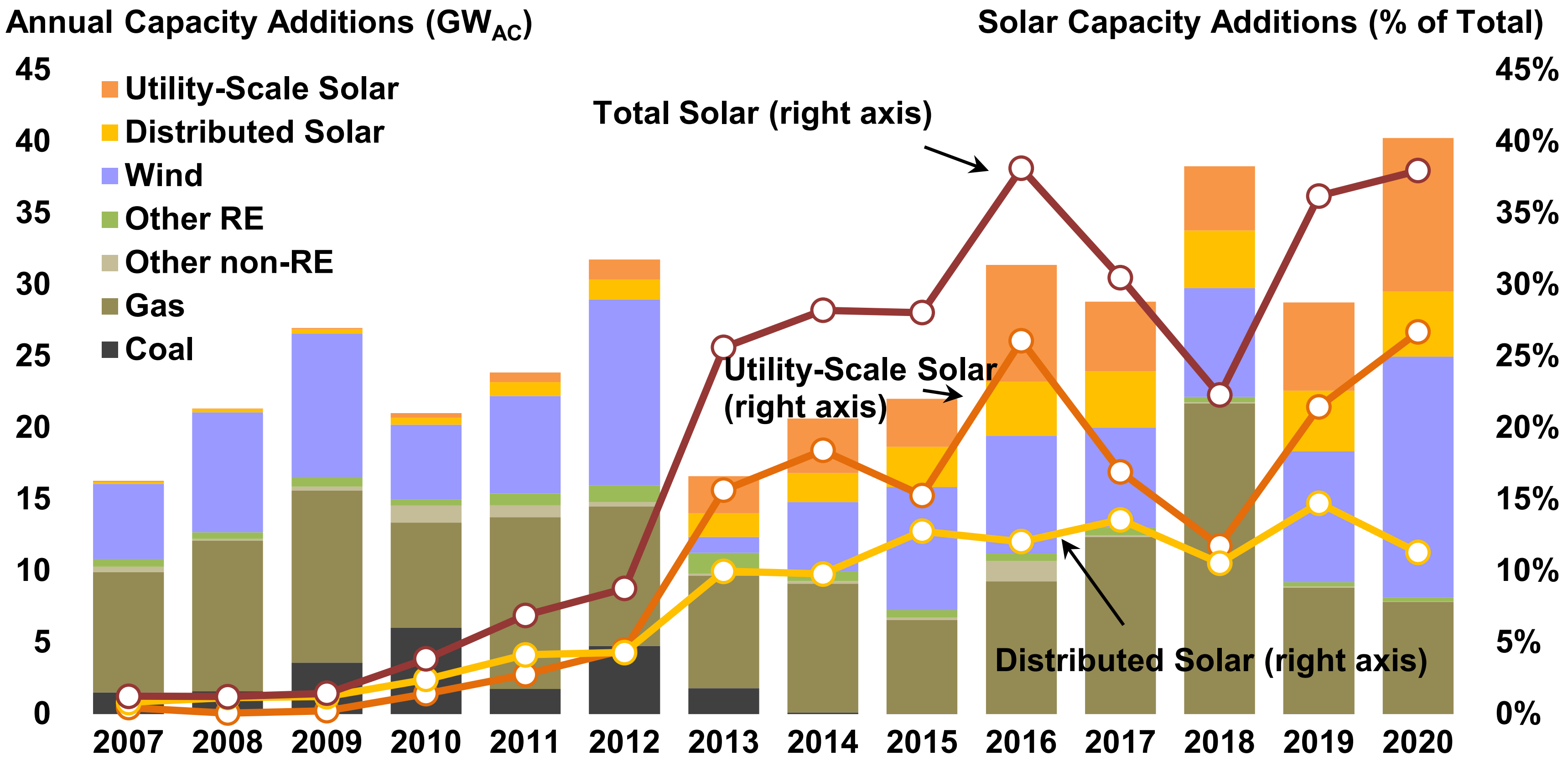
Note: Wood Mackenzie/SEIA’s graph above defines utility-scale solar as >1 MW_{DC} while this report uses a definition of >5 MW_{AC}.

Solar power was the second largest source of U.S. electricity-generating capacity additions in 2020



Bars represent annual capacity additions in GW_{AC} (left axis), lines represent solar's capacity share (right axis)

Led by the utility-scale sector, solar power has comprised >20% of all generating capacity additions in the United States in each of the past eight years.

In 2020, solar made up 38% of all U.S. capacity additions (with utility-scale accounting for 27%), behind wind (42%) but ahead of natural gas (19%).

Sources: *ABB, AWEA, Wood Mackenzie/SEIA Solar Market Insight Reports, Berkeley Lab*

Note: This graph follows Wood Mackenzie/SEIA split between distributed and utility-scale solar, rather than our 5 MW_{AC} threshold.

Solar penetration rates topped 22% in California and exceeded 10% in four other states

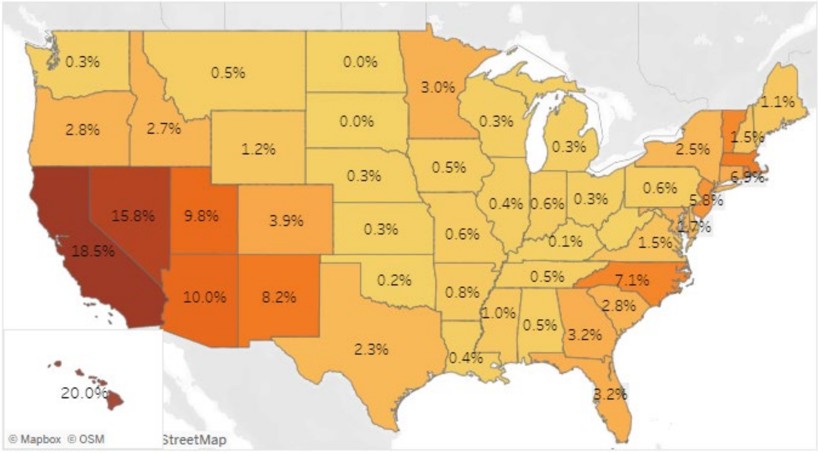
State	Solar generation as a % of in-state generation		Solar generation as a % of in-state load	
	All Solar	Utility-Scale Solar Only	All Solar	Utility-Scale Solar Only
California	22.7%	14.4%	19.4%	12.3%
Massachusetts	18.9%	7.6%	7.9%	3.2%
Hawaii	16.5%	5.0%	20.0%	6.1%
Nevada	14.8%	12.7%	16.1%	13.8%
Vermont	14.3%	7.4%	6.9%	3.6%
Utah	8.1%	6.6%	9.8%	8.0%
Arizona	7.9%	5.3%	10.9%	7.4%
North Carolina	7.5%	7.2%	7.1%	6.9%
New Jersey	6.4%	2.5%	5.8%	2.2%
Rhode Island	6.1%	2.5%	6.9%	2.8%
New Mexico	5.9%	4.9%	8.2%	6.7%
Maryland	4.4%	1.6%	2.8%	1.0%
Colorado	4.0%	2.8%	3.9%	2.7%
Delaware	3.6%	1.2%	1.7%	0.6%
Georgia	3.5%	3.3%	3.2%	2.9%
Idaho	3.4%	2.9%	2.7%	2.3%
Minnesota	3.3%	3.1%	3.0%	2.8%
Florida	3.1%	2.6%	3.2%	2.8%
New York	2.5%	0.8%	2.5%	0.8%
Connecticut	2.3%	0.5%	3.6%	0.8%
Rest of U.S.	*0.8%*	*0.6%*	*1.0%*	*0.7%*
TOTAL U.S.	**3.3%**	**2.2%**	**3.6%**	**2.5%**

Solar penetration rates vary considerably depending on whether they are calculated as a percentage of generation or load (e.g., see Vermont).

In 2020, California exceeded 20% of solar penetration levels based on generation share while four other states surpassed 10%. Four states had >10% based on load share.

Contribution of utility-scale also varies (a minority in Northeast states and Hawaii, a majority in Southwest states and overall U.S.).

Percentage of In-State Electricity Sales and Generation from Solar PV, as of 2020



You can explore this data interactively at https://emp.lbl.gov/capacity-and-generation-state

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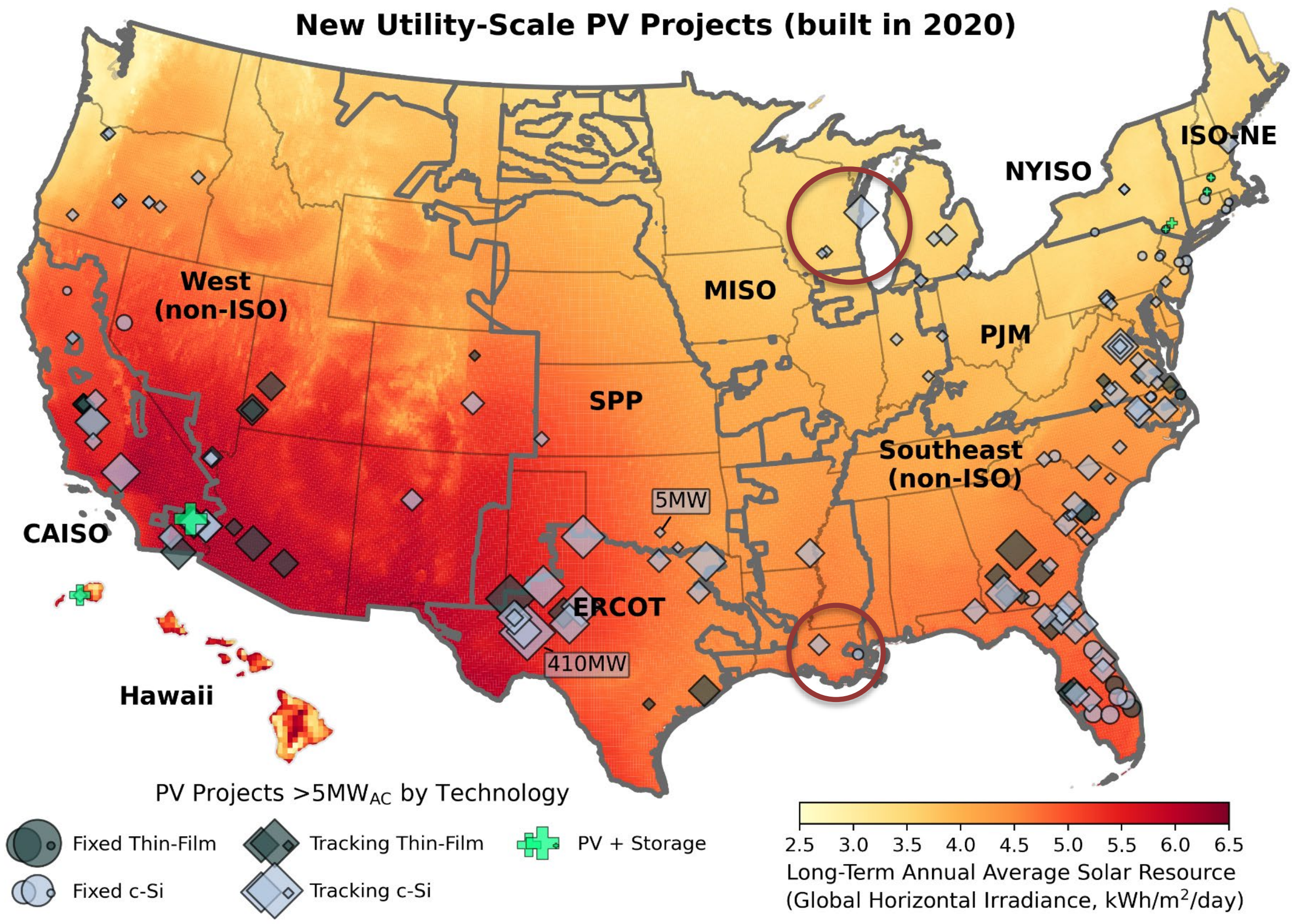
Note: In this table, "utility-scale" refers to projects ≥ 1 MW_{AC}, rather than our typical 5 MW_{AC} threshold.

In 2020, Texas led the nation in utility-scale solar deployment



Texas completed some of the largest projects we have seen in the US (up to 410 MW_{AC}).

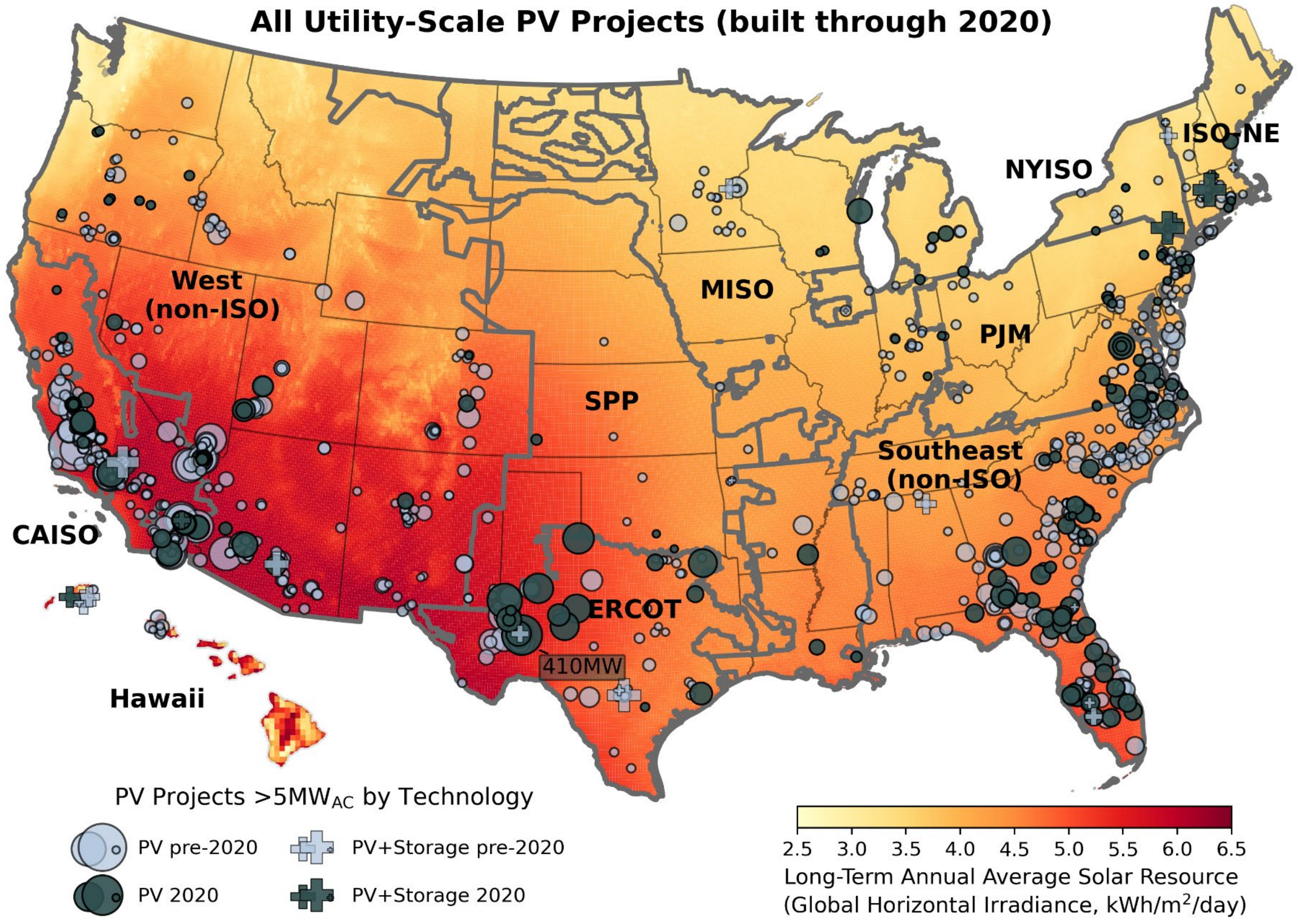
Fixed-tilt ( ) projects are increasingly only being built on particularly challenging sites (e.g., due to terrain or wind loading) or in the least-sunny regions in the northeast.

Other high-latitude states such as Oregon, Wisconsin, Michigan, New York and Maine added predominantly **tracking** projects in 2020 ( ).

In 2020, storage ( ) was added to already existing (1) and new (5) PV projects. 4 of these were built in the northeast, while high penetration regions in HI and CA added one each.

2 new states added their first utility-scale PV projects: **Wisconsin** and **Louisiana.**

Utility-scale solar has become a growing source of electricity in all regions of the United States



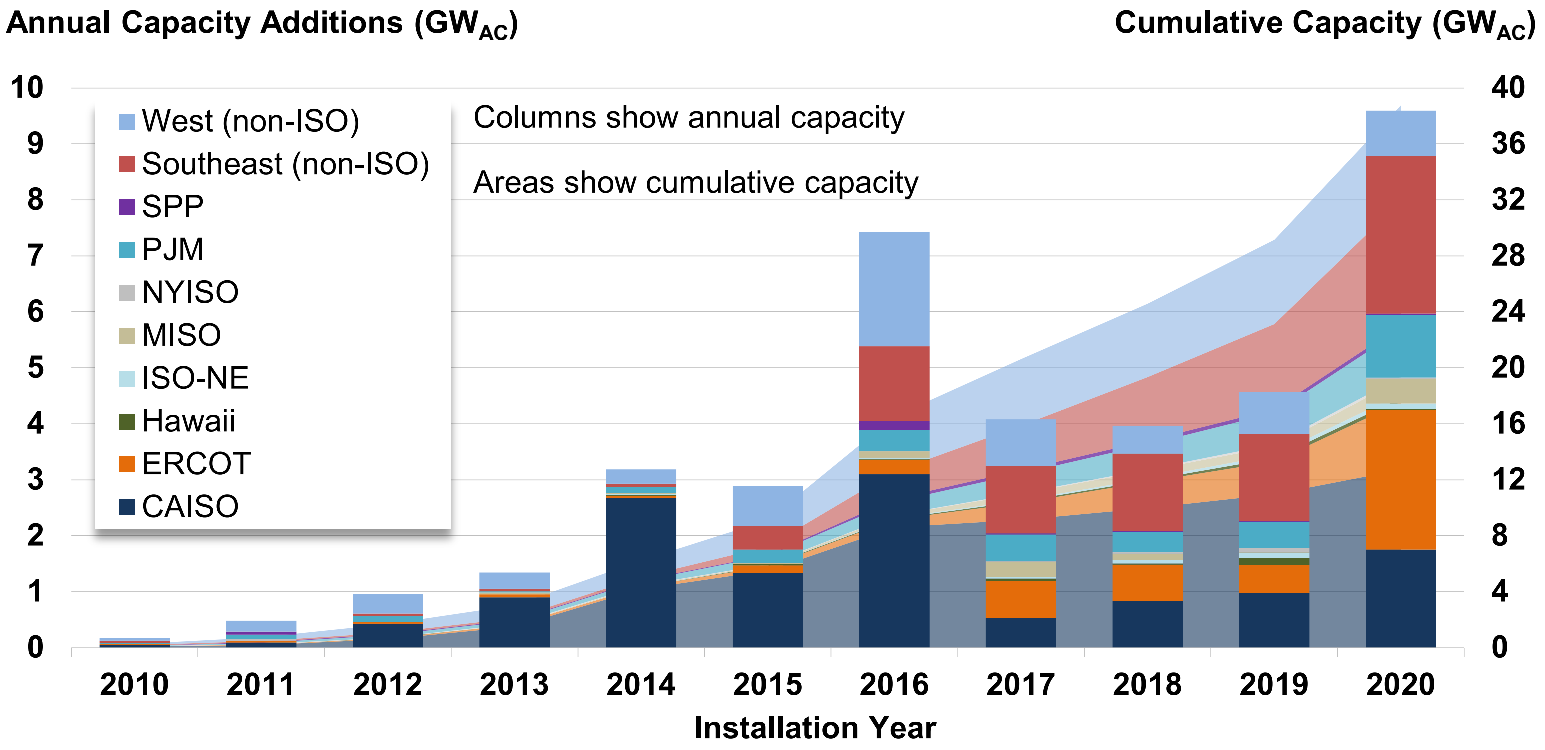
Utility-scale PV is well-represented throughout the nation, with the exception of upper-Midwestern states in the “wind belt”.

Recent recipients of new utility-scale solar projects in the north (Idaho, Minnesota) did not add new capacity in 2020, while Montana, the Dakotas, Iowa, New Hampshire, and West Virginia still await their first utility-scale solar projects in our sample.

You can explore this data interactively at https://emp.lbl.gov/technology-trends

Texas and the Southeast added the most utility-scale solar capacity in 2020

PV project population: 969 projects totaling 38,745 MW_{AC}



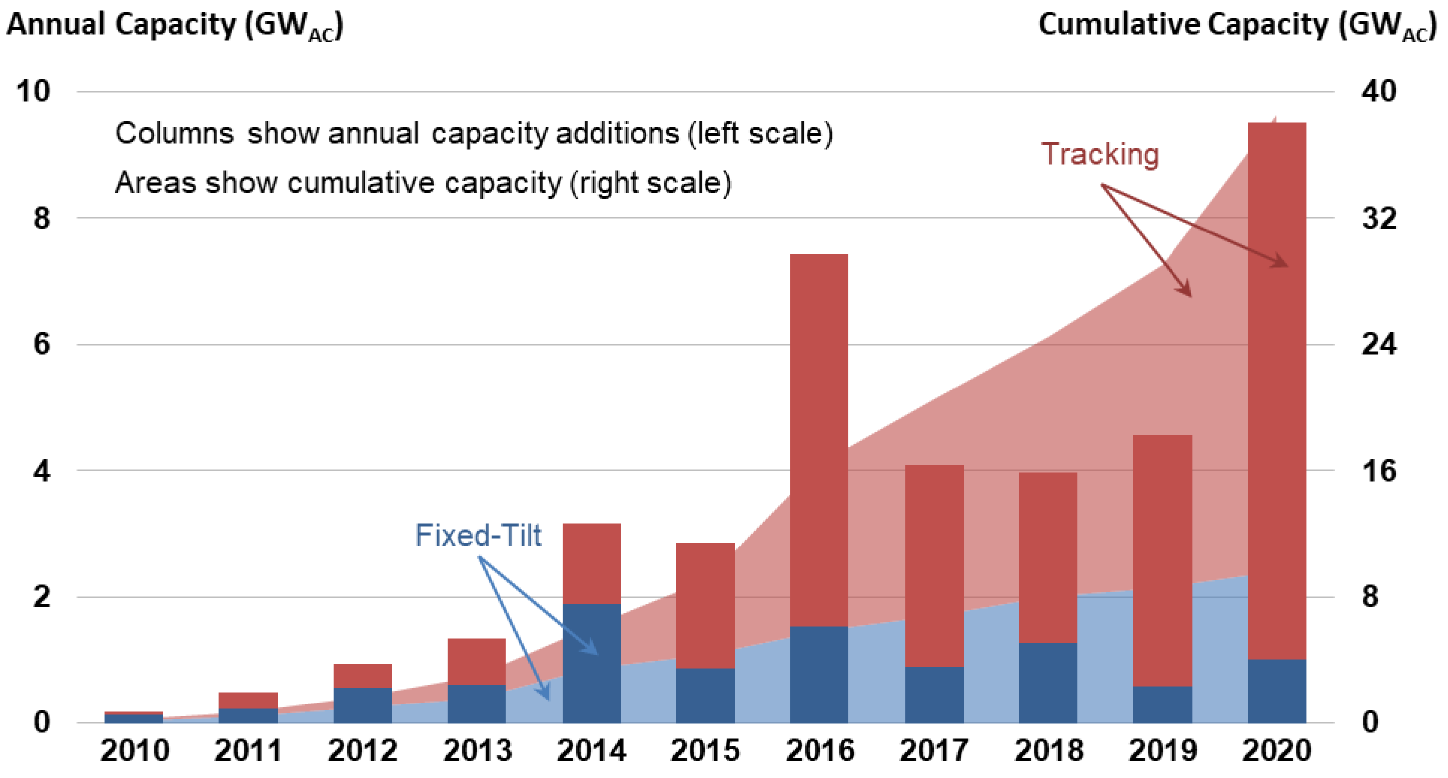
Texas (ERCOT) surpassed California as the leader of utility-scale solar growth in 2020, adding 2.5 GW_{AC} or 26% of total U.S. additions.

Florida (1.6 GW_{AC}), **Georgia**, and **Virginia** (both 0.7 GW_{AC}) led solar growth in the Southeast in 2020. **California**, which added 1.6 GW_{AC} in 2020, still accounts for the most installed capacity on a cumulative basis (32% of the U.S. total).

You can explore this data interactively at https://emp.lbl.gov/capacity-and-generation-state

Projects with tracking technology dominated 2020 additions

PV project population: 969 projects totaling 38,745 MW_{AC}

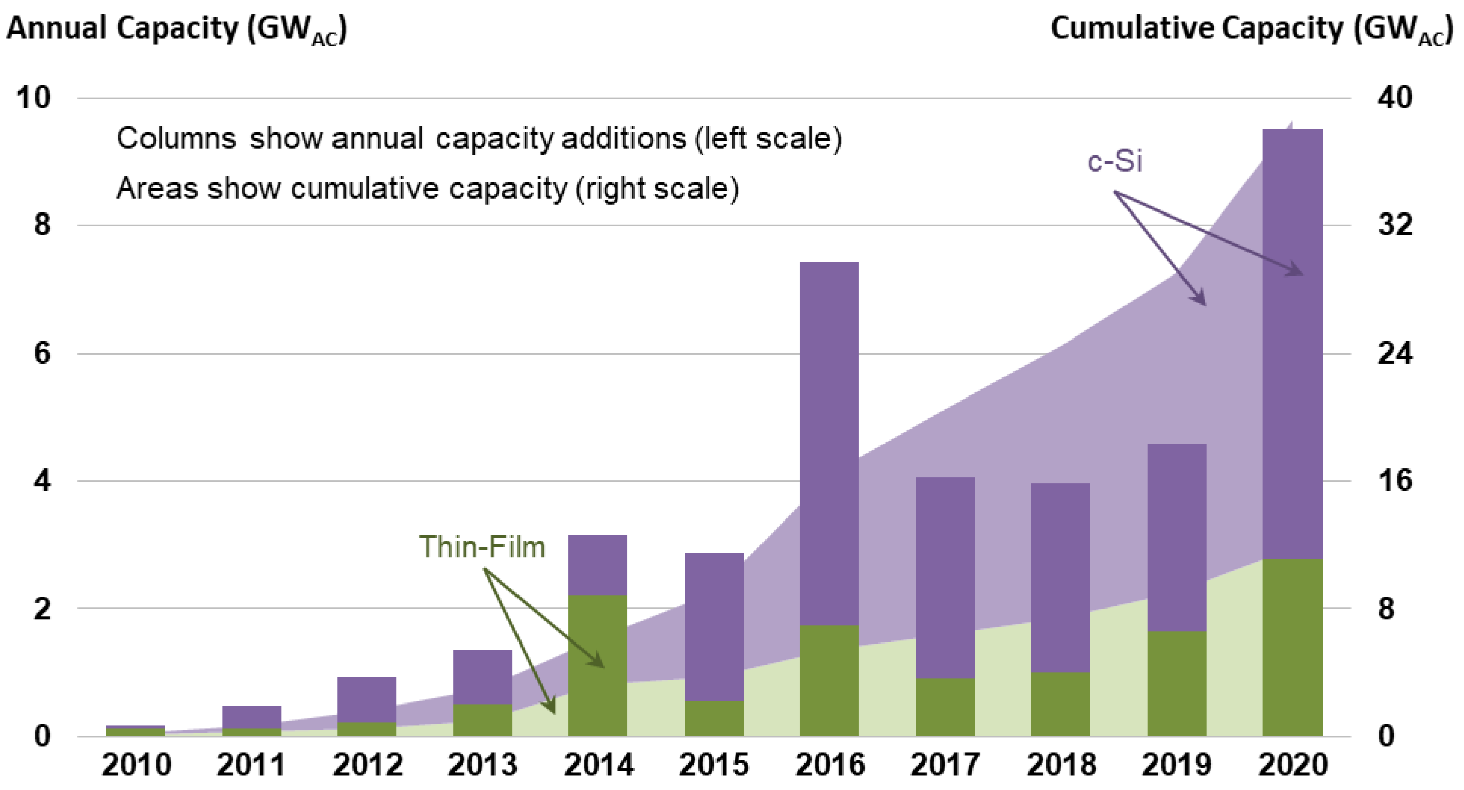


Projects using single-axis **tracking** have consistently exceeded **fixed-tilt** installations since 2015, but achieved a new level of dominance in 2020, with 89% of all new capacity using tracking.

Upfront cost premiums for trackers have fallen over the years, resulting in favorable economics in most of the United States thanks to increased generation.

Projects with c-Si modules led thin-film additions in 2020

PV project population: 969 projects totaling 38,745 MW_{AC}



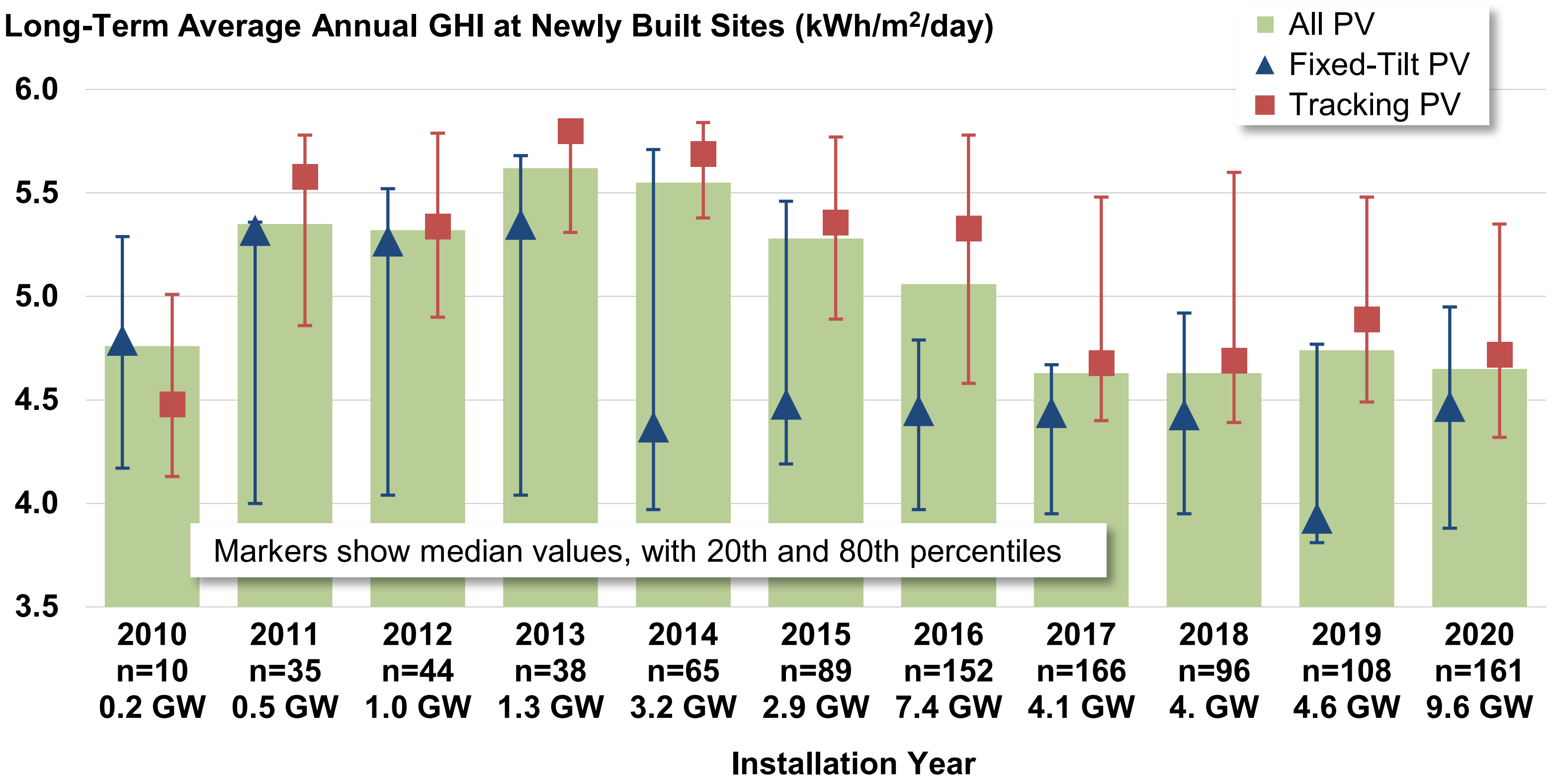
c-Si modules continued their clear lead (71% of newly installed capacity) relative to **thin-film** modules (29%), though the latter have become more popular since 2018 as they were not subject to Section 201 import tariffs.

Hanwha had the highest market share among c-Si modules in our sample, followed by Jinko and Trina. All thin-film modules in our 2020 sample were made by First Solar.

You can explore this data interactively at https://emp.lbl.gov/technology-trends

The median global horizontal irradiance (GHI) at utility-scale solar project sites has stabilized since 2017

PV project population: 969 projects totaling 38,745 MW_{AC}



The median solar resource (measured in long-term global horizontal irradiance—**GHI**) at new project sites has declined since development began expanding to less-sunny states post-2013, but has largely stabilized since 2017.

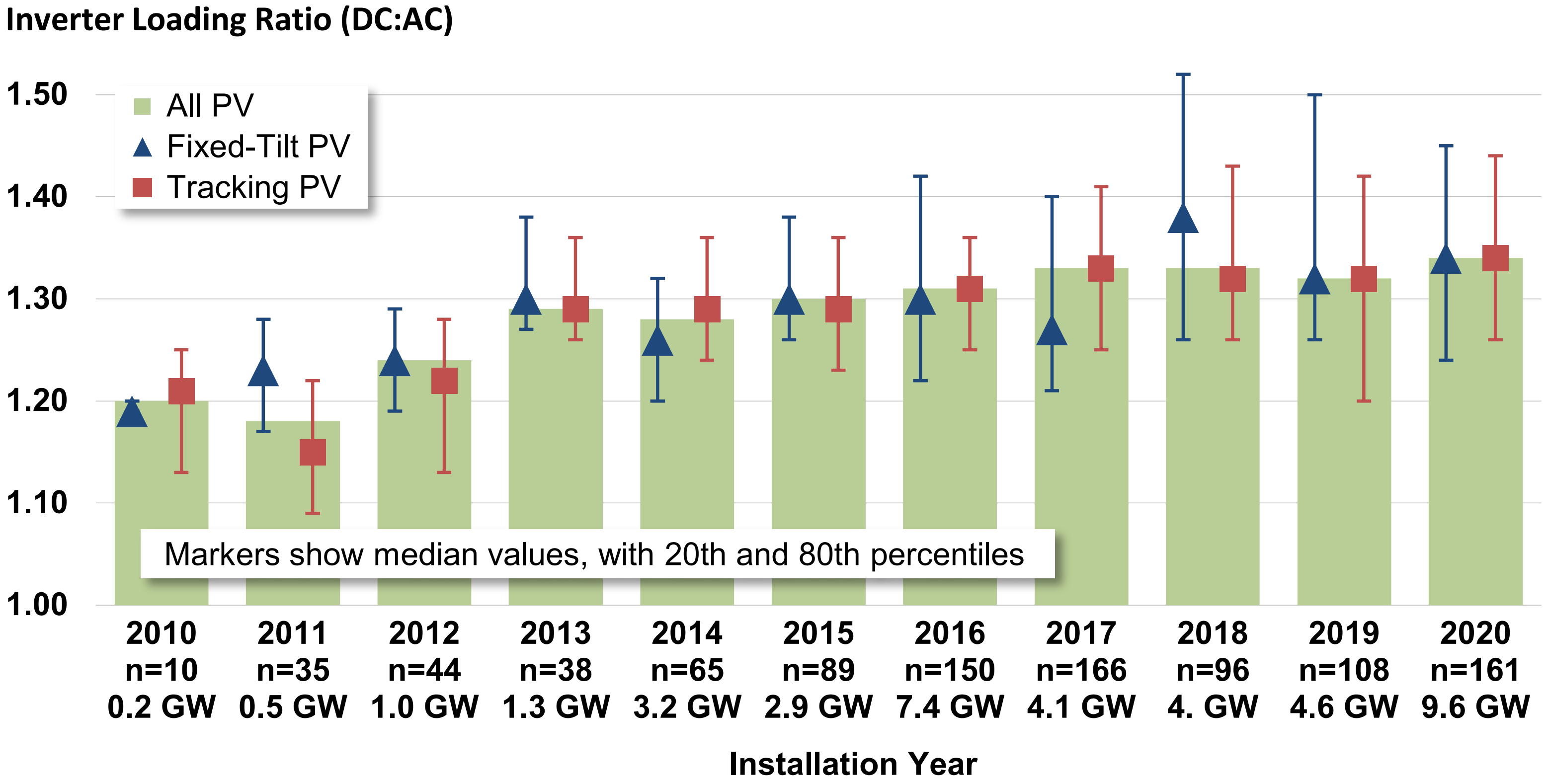
Fixed-tilt PV is increasingly relegated to lower-insolation sites, while tracking PV is pushing into those same areas (note the decline in its **20th percentile**).

Exceptions are fixed-tilt installations in windy regions (Florida), on brownfields and landfill sites, and on particularly challenging terrain.

All else equal, the buildout of lower-GHI sites dampens sample-wide capacity factors (reported later).

The median inverter loading ratio (ILR) continued to gradually climb

PV project population: 969 projects totaling 38,745 MW_{AC}



As module prices have fallen (faster than inverter prices), developers have oversized the DC array capacity relative to the AC inverter capacity to enhance revenue and reduce output variability.

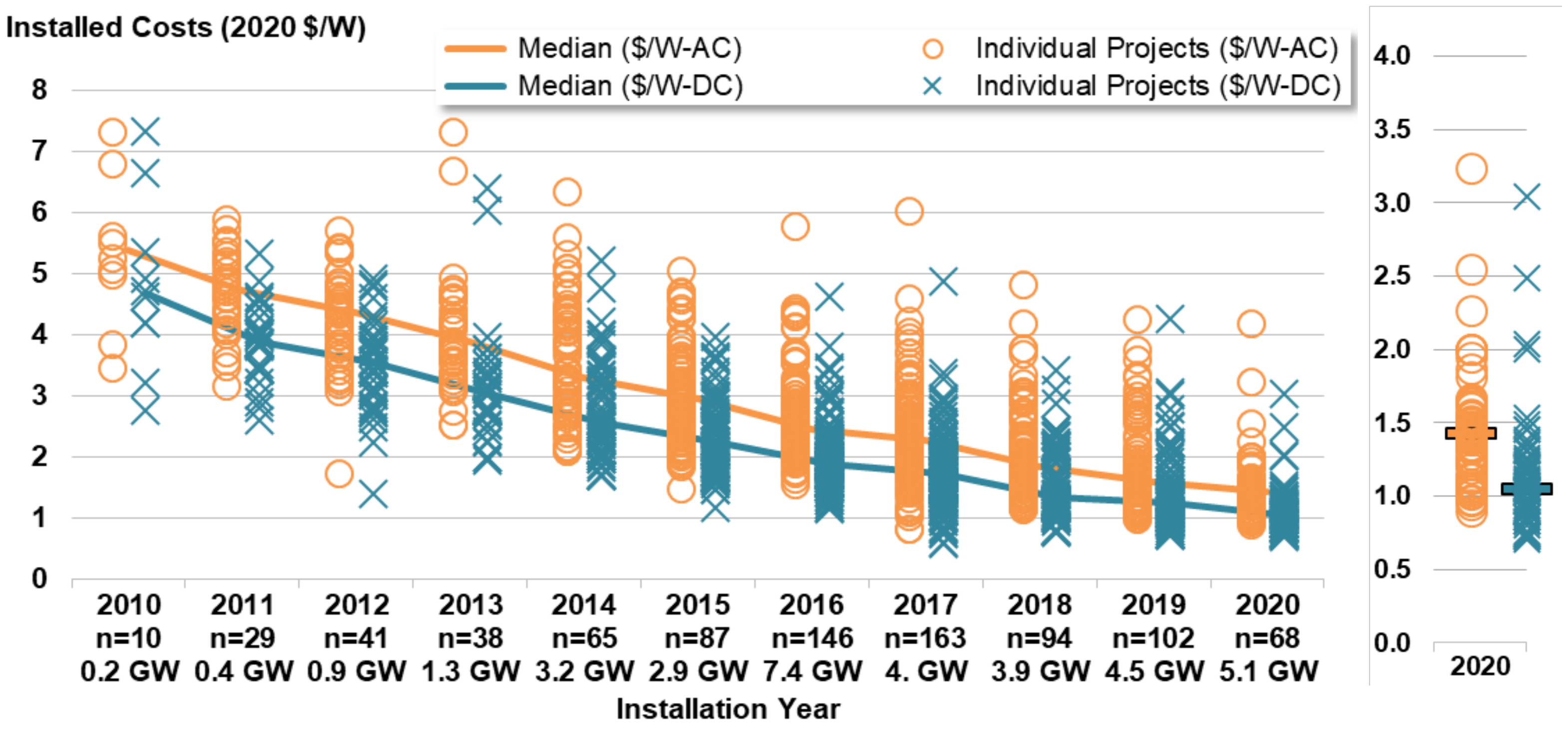
The median inverter loading ratio (**ILR** or DC:AC ratio) increased slightly to 1.34 in 2020, compared with 1.32 in 2019.

All else equal, a higher ILR should boost capacity factors (reported later).

Capital Costs (CapEx) and O&M Costs

Median installed costs of PV have fallen by 74% (or 12% annually) since 2010, to $1.42/W_{AC}$ ($1.05/W_{DC}$) in 2020

Sample: 848 projects totaling 34,020 MW_{AC}



The lowest 20th percentile of project costs fell from $1.3/W_{AC}$ ($1.0/W_{DC}$) in 2019 to $1.1/W_{AC}$ ($0.9/W_{DC}$) in 2020.

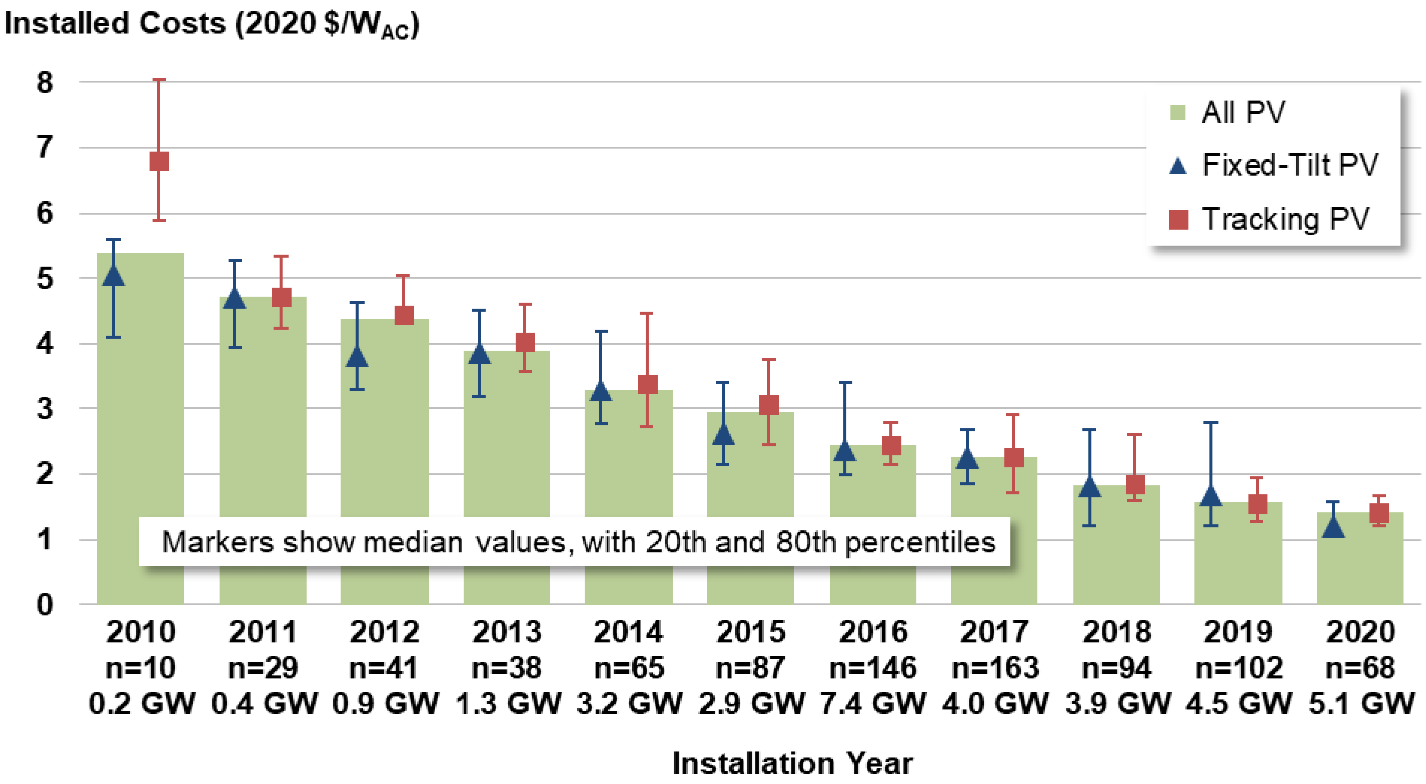
The lowest-cost project among the 68 data points in 2020 was $0.9/W_{AC}$ ($0.7/W_{DC}$).

Historical sample is robust (covering 99% of installed capacity through 2019). 2020 data covers 41% of new projects or 63% of new capacity.

This sample is backward-looking and does not reflect the costs of projects built in 2021/2022.

The cost premium for tracking projects relative to fixed-tilt has diminished over time

Sample: 848 projects totaling 34,020 MW_{AC}



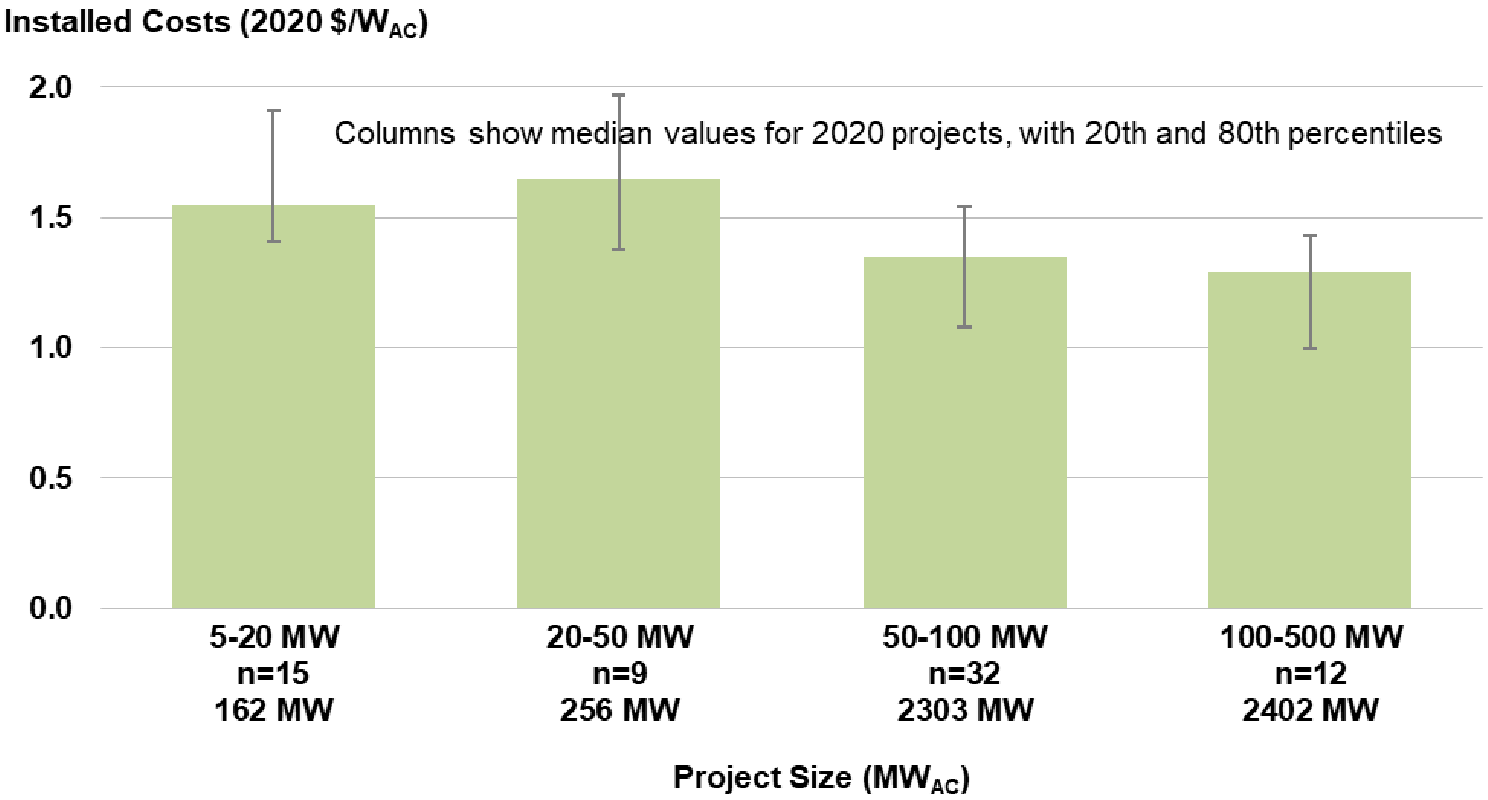
Through 2016, tracking projects in our sample were, on average, regularly more expensive (though by varying amounts) than fixed-tilt projects. This relationship became more nuanced starting in 2017, and in 2019, tracking projects ($1.6/$W_{AC}$ or $1.2/$W_{DC}$) appeared to be cheaper than fixed-tilt projects ($1.7/$W_{AC}$ or $1.3/$W_{DC}$).

This apparent reversal may be driven by challenging construction environments for fixed-tilt projects (e.g., high wind loads, sensitive brown-field sites) as well as sampling issues. However, for any ***individual*** project, using trackers presumably has a higher CapEx than mounting at a fixed-tilt.

In our 2020 sample, trackers ($1.4/$W_{AC}$ or $1.1/$W_{DC}$) once again exhibit a premium over fixed-tilt plants ($1.2/$W_{AC}$ or $0.9/$W_{DC}$). Trackers can sustain some amount of higher upfront costs because they deliver more kWh per kW.

Larger utility-scale solar projects (100-500 MW) cost 17% less than smaller projects (5-20 MW) per MW of installed capacity in 2020

Sample in 2020: 68 projects totaling 5,123 MW_{AC}



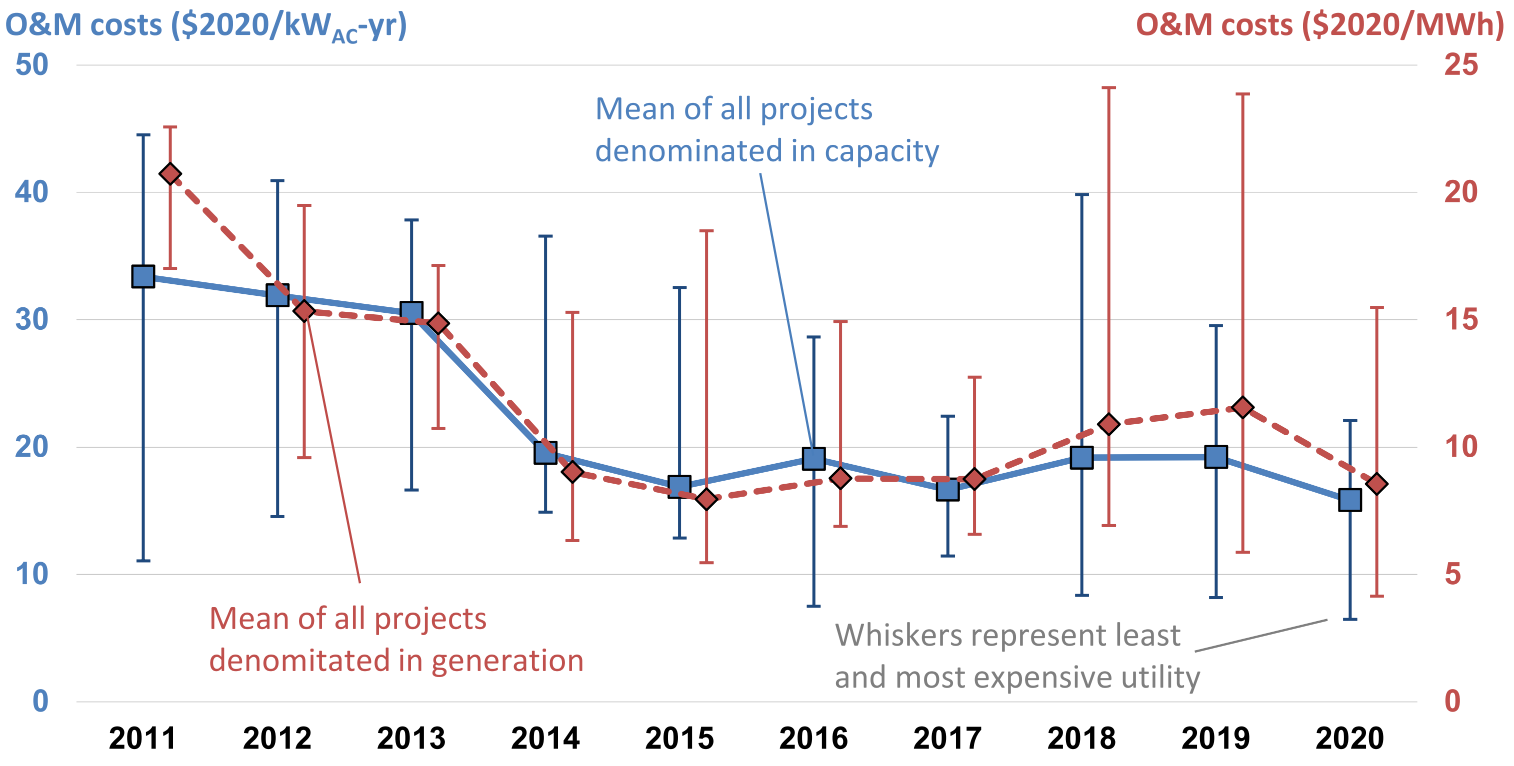
Differences in project size could potentially explain cost variation—we focus only on 2020 for this slide.

Cost savings seem to occur especially in the third size bin (50-100 MW_{AC}) and fourth size bin (100-500 MW_{AC})—at \$1.35/W_{AC} and \$1.29/W_{AC}.

In \$/W_{DC} terms, price decline is even more obvious over the first three bins:

- \$1.23/W_{DC} for 5-20MW
- \$1.05/W_{DC} for 20-50MW
- \$0.95/W_{DC} for 50-100MW
- \$0.98/W_{DC} for 100-500MW

Improvements in operation and maintenance (O&M) costs have plateaued in recent years



The blue line expresses annual O&M costs in capacity terms (left axis), the red line in energy terms (right axis)

Cost Scope (per guidelines for FERC Form 1):
- Includes supervision and engineering, maintenance, rents, and training
- Excludes payments for property taxes, insurance, land royalties, performance bonds, various administrative and other fees, and overhead

13 utilities report solar O&M costs for plants that they own, representing a mix of technologies and at least one full operational year (at least 2020).

Average O&M costs for the cumulative sample have declined from about $32/kW$_{AC}$-year in 2011 to about $16/kW$_{AC}$-year 2020.

The overall cost range among utilities narrowed in 2020 relative to 2018 and 2019.

These O&M costs are only one part of total operating expenses (OpEx)—see Cost Scope in box to the left.

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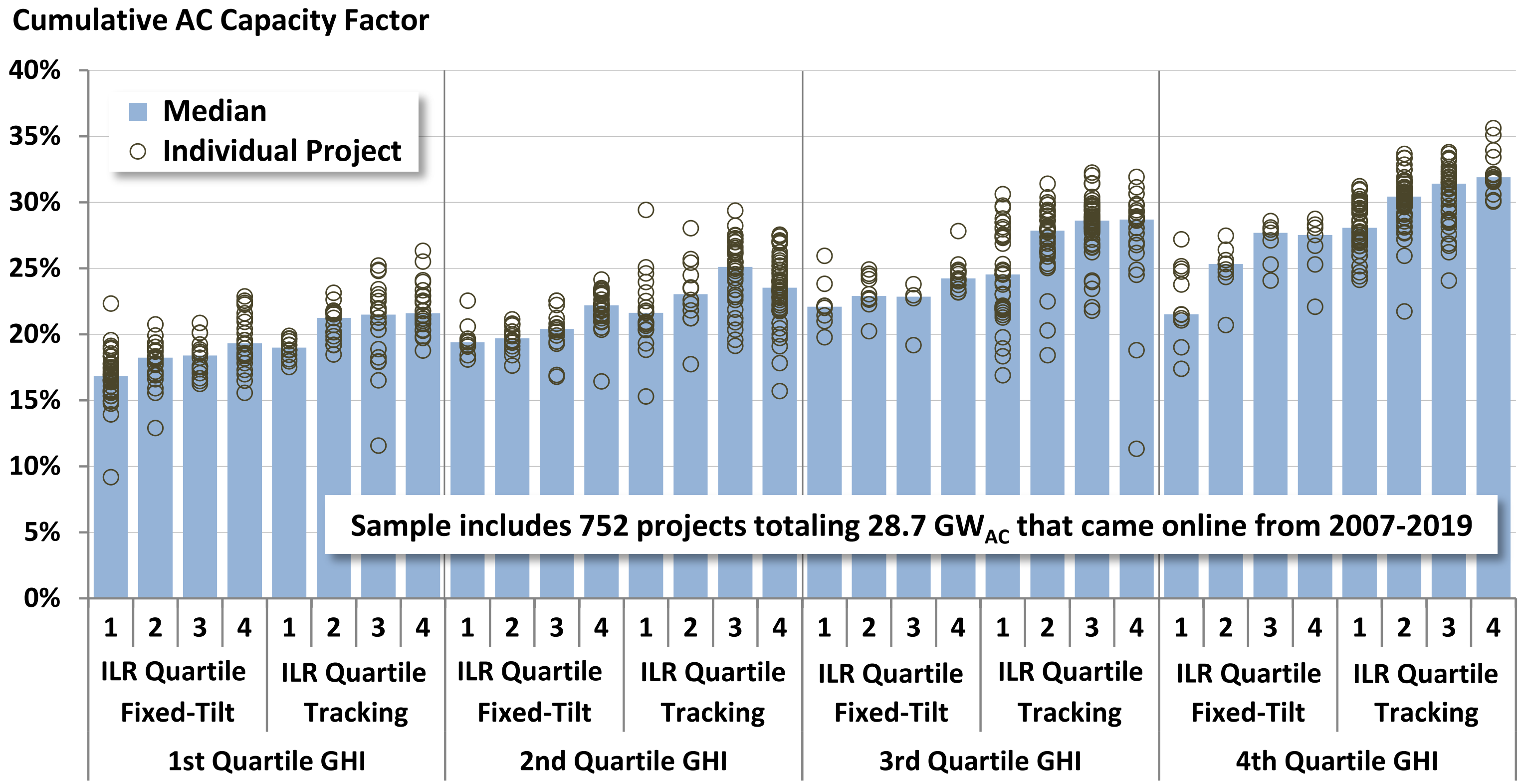
Performance (Capacity Factors)

24% median PV net capacity factor (cumulative, sample-wide), but with large project-level range from 9%-36%

PV performance sample: 752 projects totaling 28,652 MW_{AC}



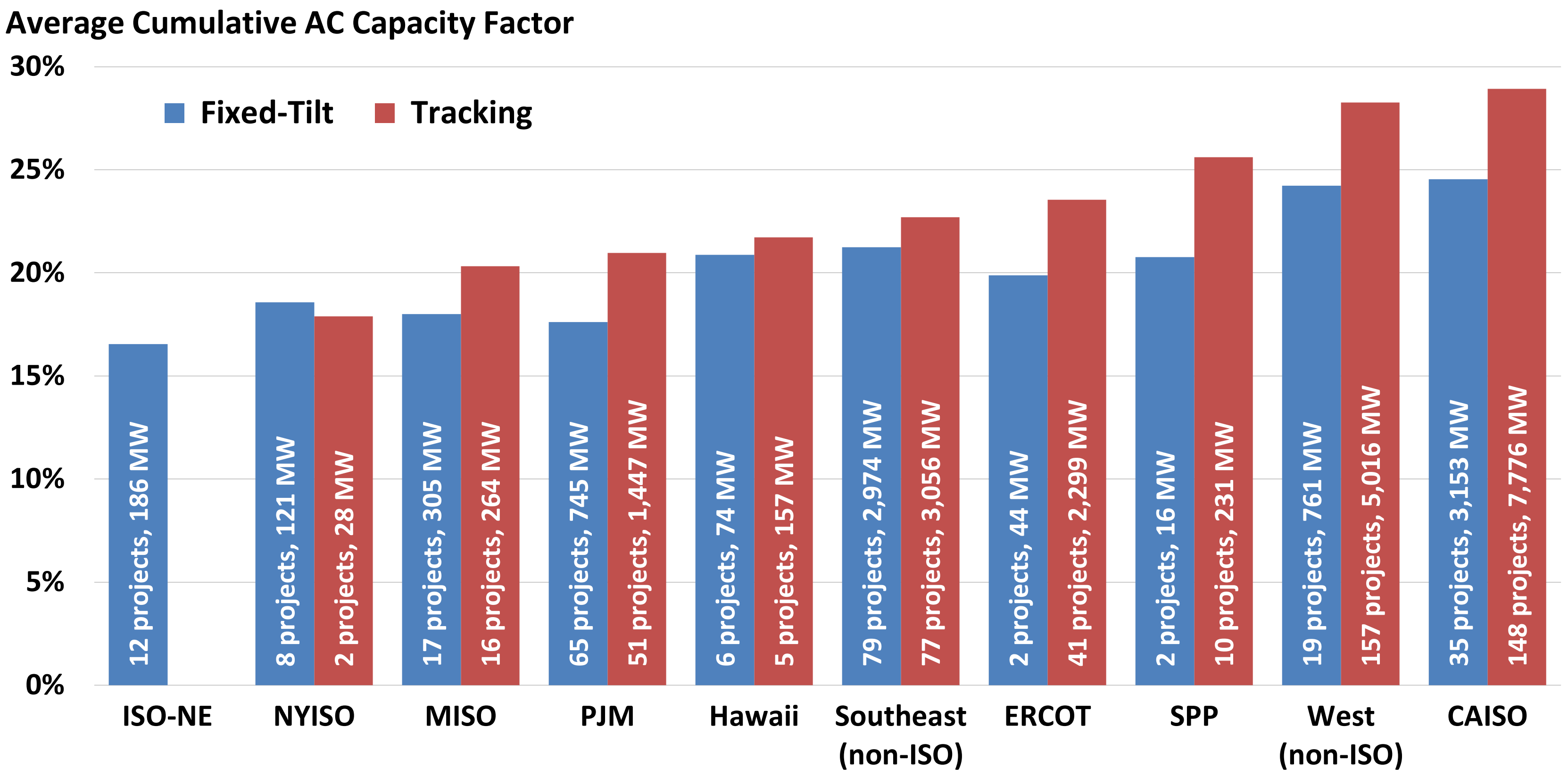
Project-level variation in PV capacity factor driven by:

- **Solar Resource (GHI)**: Strongest solar resource quartile has a ~8 percentage point higher capacity factor than lowest resource quartile
- **Tracking**: Adds ~4 percentage points to capacity factor on average, depending on solar resource quartile
- **Inverter Loading Ratio (ILR)**: Highest ILR quartiles have on average ~3 percentage point higher capacity factors than lowest ILR quartiles

You can explore this data interactively at https://emp.lbl.gov/pv-capacity-factors

Tracking boosts capacity factors by up to 5 percentage points in high-insolation regions

Sample: 752 projects totaling 28,652 MW_{AC}



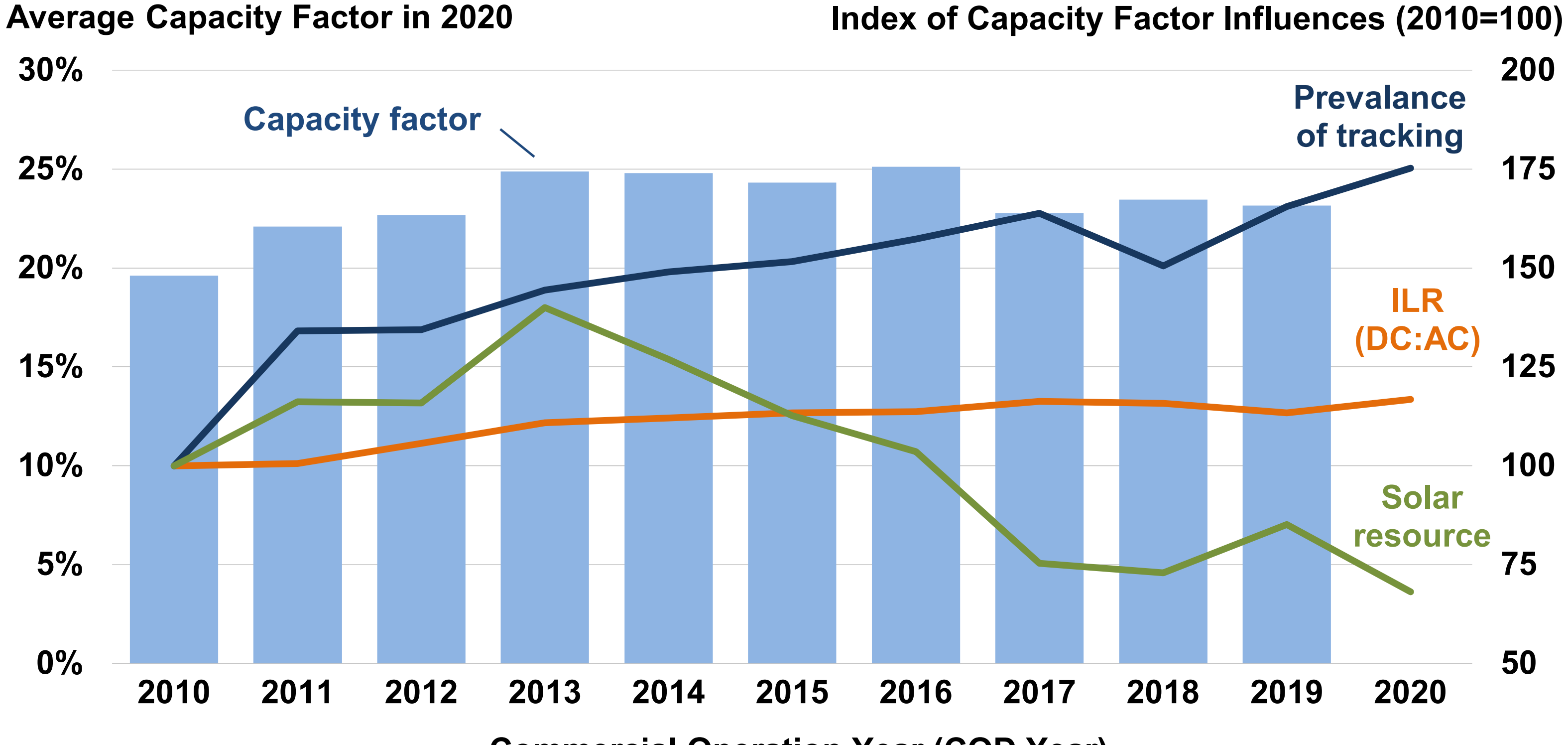
Not surprisingly, capacity factors are highest in California and the non-ISO West, and lowest in the Northeast (ISO-NE and NYISO).

Tracking provides more benefit in high-insolation regions, leading to a greater proportion of tracking projects in those regions.

Note: The regions are defined in the earlier slides with a map of the United States

You can explore this data interactively at https://emp.lbl.gov/pv-capacity-factors

Since 2013, competing drivers have caused average capacity factors by project vintage to stagnate



The columns represent the capacity factor (left axis), the lines show changes in major drivers (right axis)

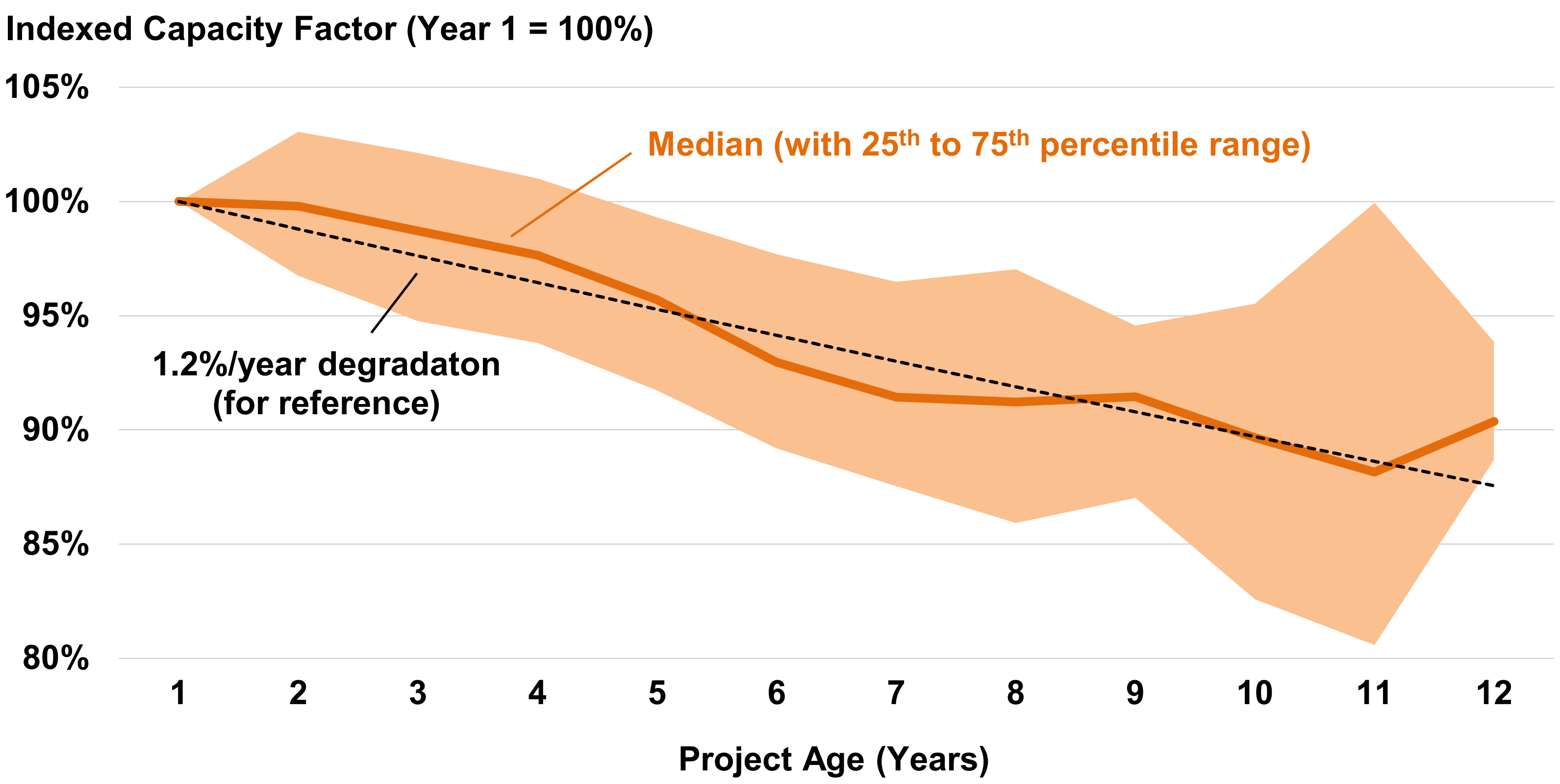
Average capacity factors increased from 2010- to 2013-vintage projects, due to an increase in:

- ILR (from 1.17 to 1.28)
- tracking (from 14% to 59% of projects)
- average site-level GHI (from 4.97 to 5.37 kWh/m^2/day)

Since 2013, however, ILRs have moved only slightly higher (to 1.31 in 2019), while tracking (80% in 2019) and GHI (4.82 kWh/m2/day) have moved in opposite directions, resulting in capacity factor stagnation (on average)

Recent flat-to-declining trend is not necessarily negative, but rather a sign of a market that is expanding geographically into less-sunny regions

Fleet-wide performance has declined as projects age, but is difficult to assess and attribute at the project level



Graph shows indexed capacity factors in each full calendar year following COD. Capacity factors have been normalized to correct for inter-year resource variation.

Graph shows plant-level performance decline from all possible degradation pathways—both recoverable and unrecoverable—including:

- Module degradation
- BOP degradation
- Soiling
- Downtime (unplanned outages, scheduled maintenance, curtailment)

Weather-normalized fleet-wide performance decline appears to be running at ~1.2%/year on average

- Should not be confused with often-cited lesser rates that pertain solely to module degradation

Levelized Cost of Energy (LCOE) and Power Purchase Agreement (PPA) Prices

LCOE and PPA price analysis: data sets and methodology

Project-level LCOE is based on empirical CapEx and capacity factor data presented earlier, as well as:

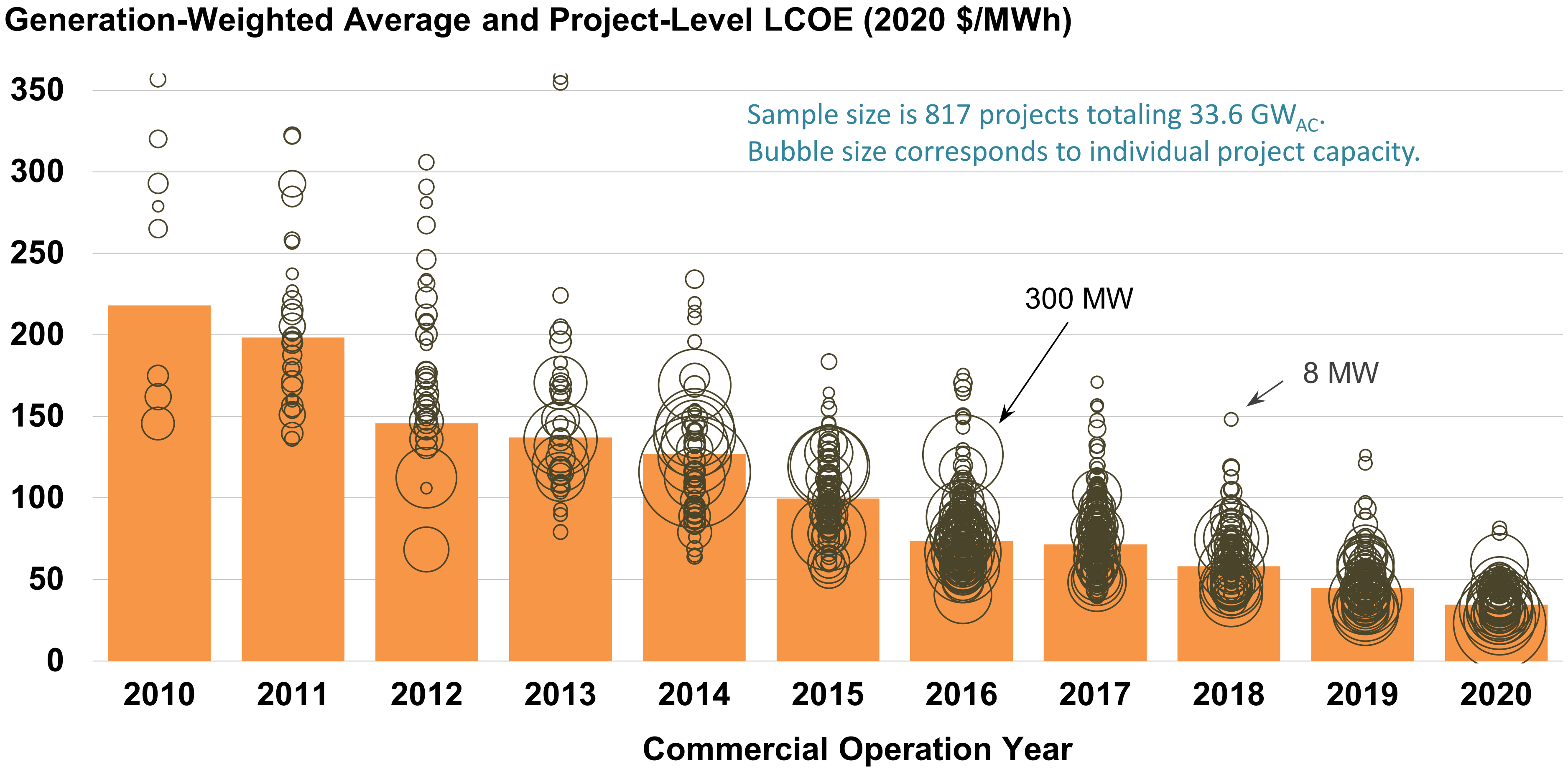
- OpEx and project life that change with vintage: OpEx declines from \$35/kW$_{DC}$-yr in 2007 to \$15/kW$_{DC}$-yr in 2020 (levelized, in 2020\$); project life increases from 21.5 years in 2007 to 33.7 years in 2020 (both based on prior LBNL research)
- Weighted average cost of capital (WACC) based on a constant 70%/30% debt/equity ratio and time-varying market rates
- Combined income tax rate of 38% pre-2018 and 25% post-2017; 5-yr MACRS; inflation expectations ranging from 1.9%-2.6%

PPA prices are from utility-scale solar plants built since 2007 or planned for future installation, and include:

- 333 PV-only contracts totaling 22.8 GW$_{AC}$
- 47 PV+battery contracts totaling 5.4 GW$_{AC}$ of PV capacity and 3.1 GW$_{AC}$ of battery capacity (presented in a later section)
- 5 concentrating solar thermal power (CSP) contracts totaling 1.2 GW$_{AC}$ (presented in a later section)

- PPA prices reflect the bundled price of electricity and RECs as sold by the project owner under the PPA
  - Dataset excludes merchant plants, projects that sell renewable energy certificates (RECs) separately, and most direct retail sales
  - Prices reflect receipt of state and federal incentives (e.g., the ITC), and as a result do not reflect solar generation *costs*
- We also present LevelTen Energy data on PPA offers; these are often for shorter contract durations, and levelization details are unclear

LCOE has fallen by 85% (or 17% annually) since 2010, to $34/MWh (without the ITC)

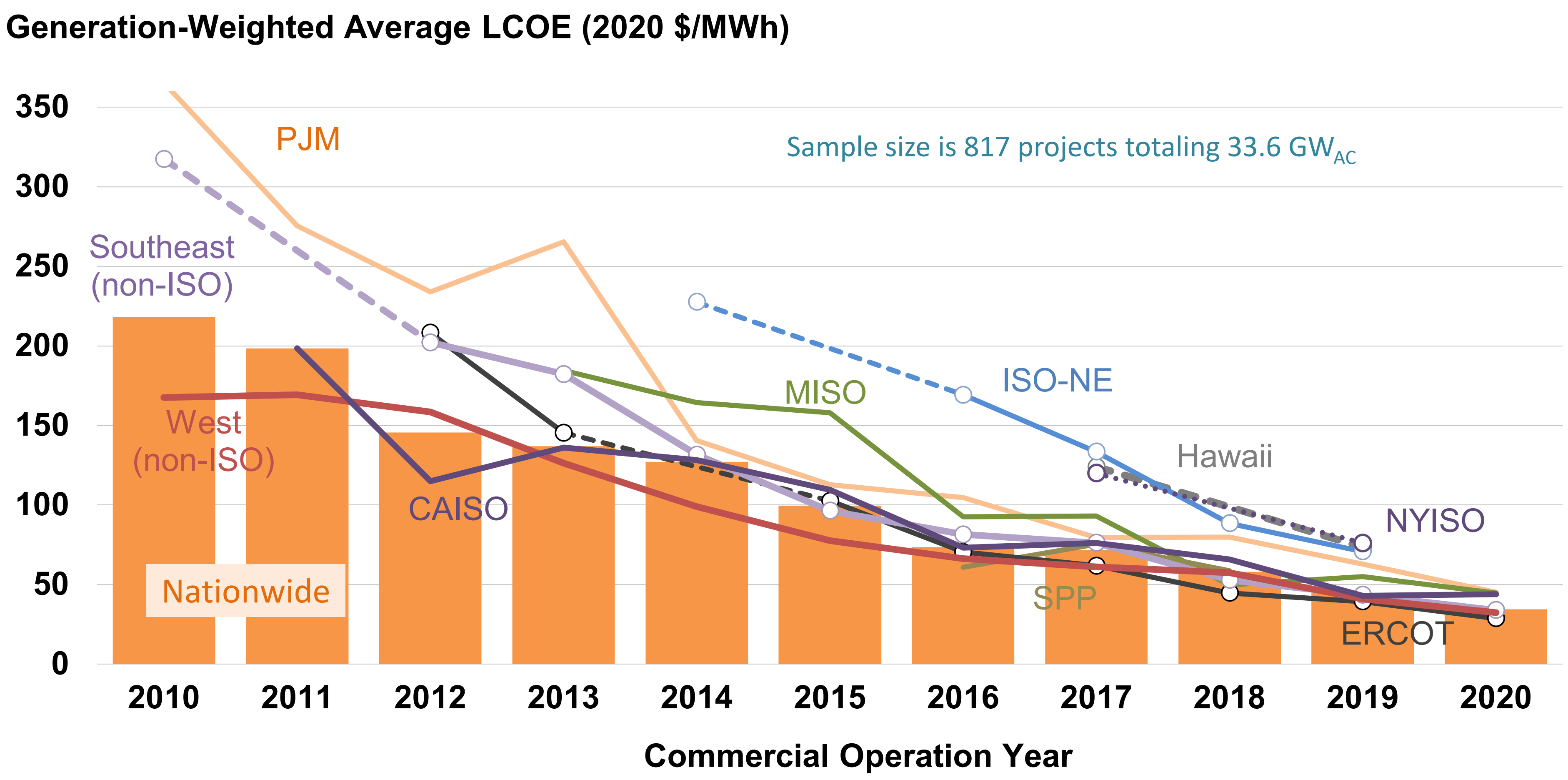


Driven by lower capital costs costs and, at least through 2013, higher capacity factors (as well as lower operating expenses, longer design life, and improved financing terms), utility-scale PV's average LCOE has fallen by about 85% since 2010, to $34/MWh in 2020 (not including the ITC).

The standard deviation of project-level LCOEs has declined sharply among recent vintages (though the coefficient of variation has been more stable).

See interactive visualization at https://emp.lbl.gov/capex-lcoe-and-ppa-prices-region

Utility-Scale PV's LCOE has gradually converged across regions

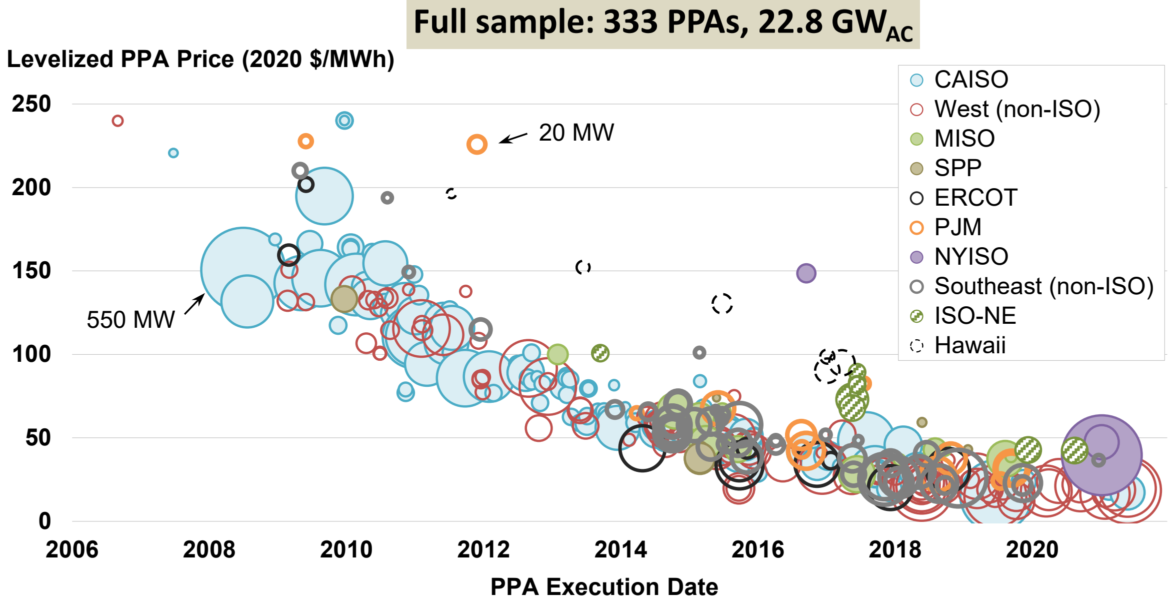


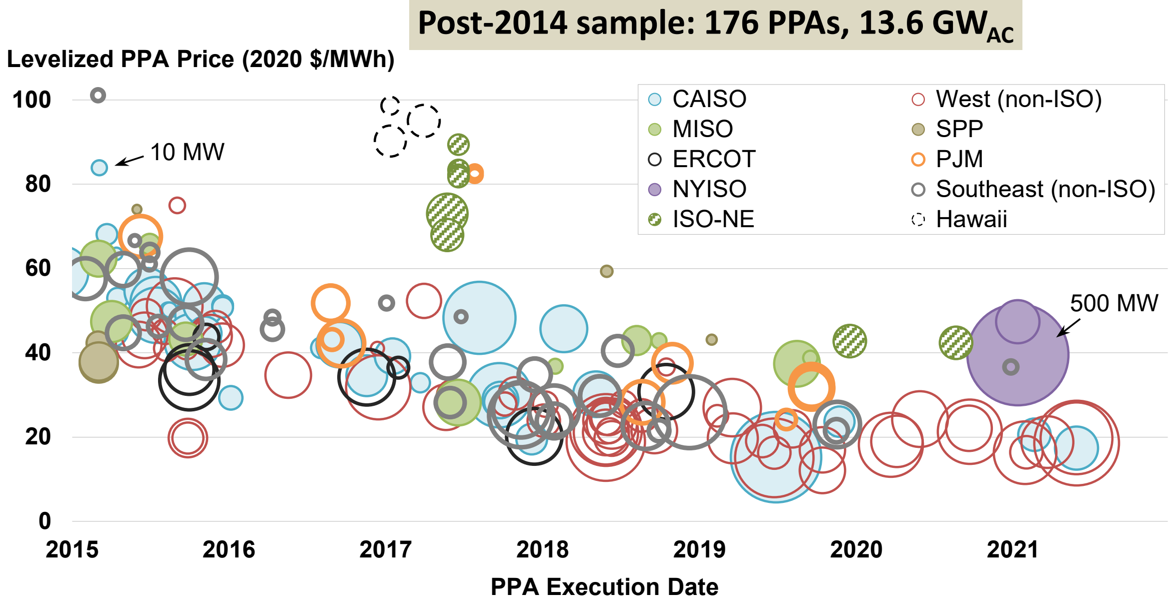
Lower-insolation regions (ISO-NE, NYISO, PJM, MISO) will always have higher LCOEs than higher-insolation regions (ERCOT, the non-ISO West and Southeast), but the difference has been narrowing (the regional standard deviation declines on average by 23% per year).

Dashed segments of lines indicate no data (i.e., <2 projects) for that particular region-year combination.

See interactive visualization at https://emp.lbl.gov/capex-lcoe-and-ppa-prices-region

Levelized PPA prices have followed LCOE lower in all regions, though the pace of decline has recently stagnated

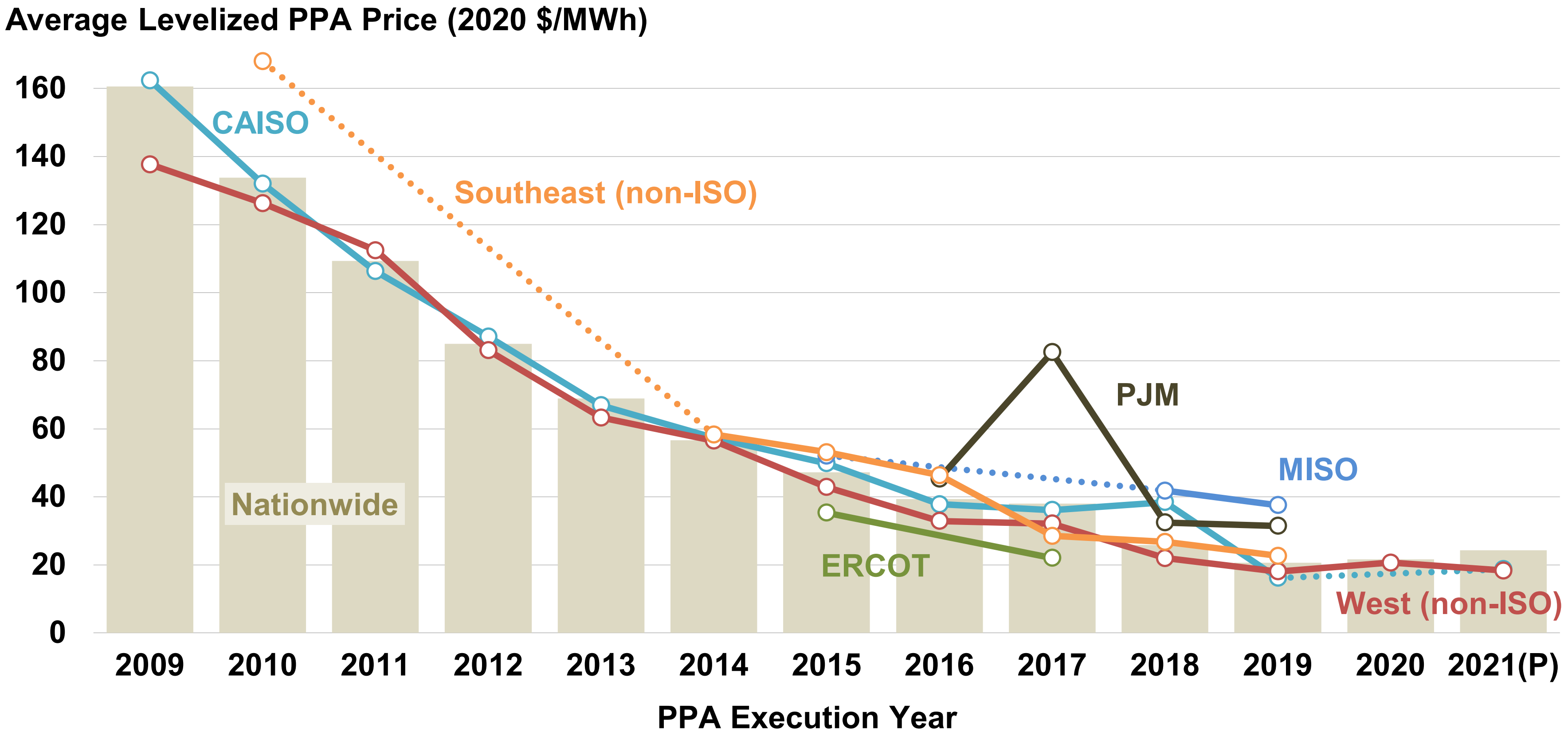




- Power Purchase Agreement (PPA) prices are levelized over the full term of each contract, after accounting for any escalation rates and/or time-of-delivery factors, and are shown in real 2020 dollars
- Aided by the 30% ITC, most recent PPAs in our sample are priced around $20/MWh for projects in CAISO and the non-ISO West, and $30-$40/MWh for projects elsewhere in the continental United States
- Hawaiian PPAs are often higher-priced (and most include battery storage, and so are not shown here—see later section)
- >95% of the sample is currently operational

You can explore this data interactively at https://emp.lbl.gov/pv-ppa-prices

Nationwide, average PPA prices have fallen by ~85% (or 15% per year) since 2009, though the pace of decline has recently stagnated



This graph focuses on national and regional average PPA prices, rather than project-level (as in the prior slide).

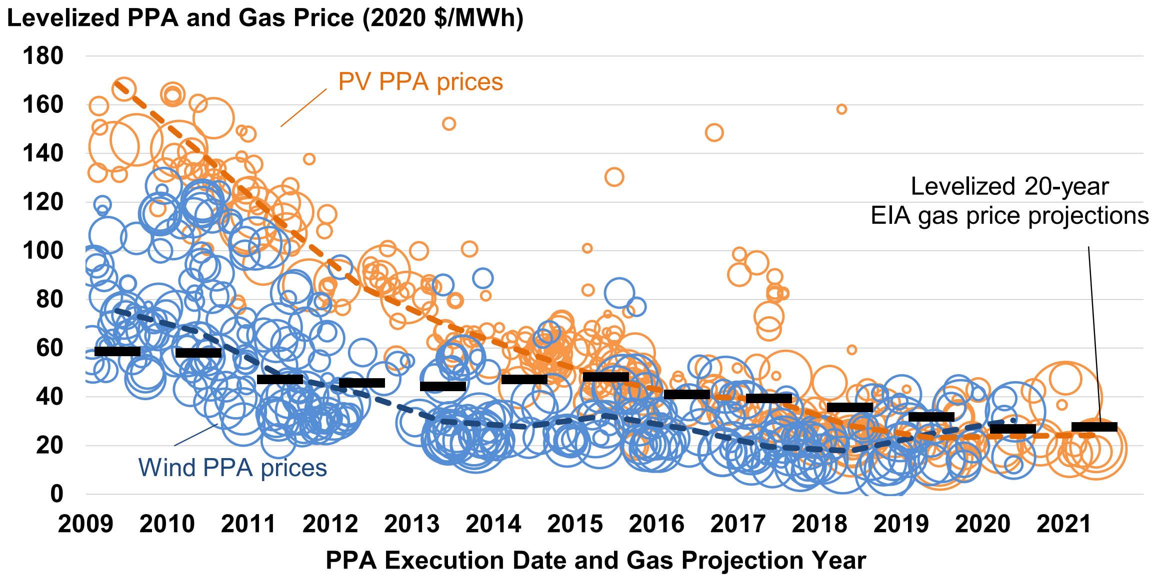
Note a slight uptick in the national average since 2019.

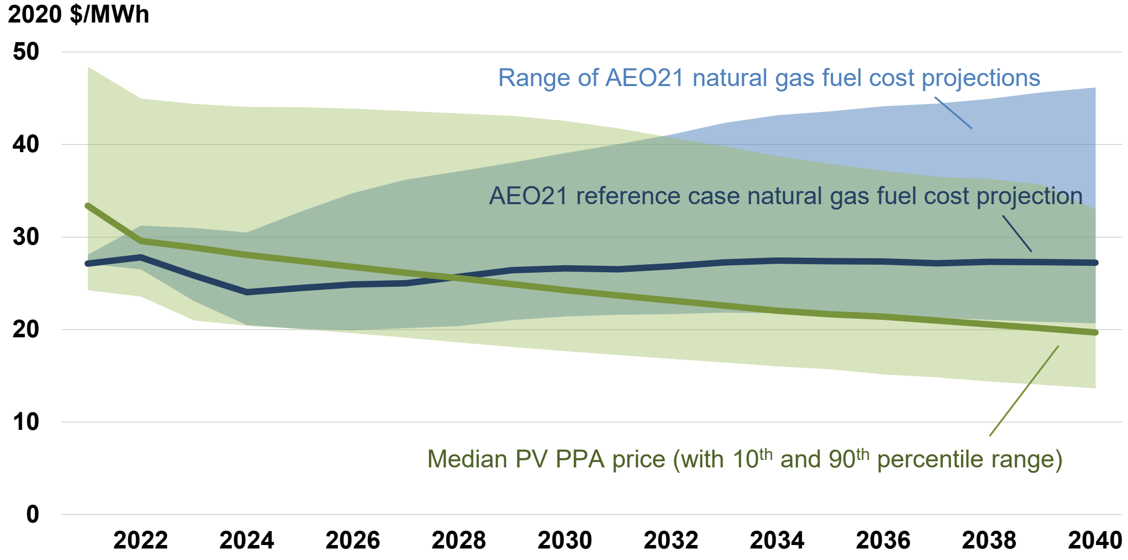
Year-Region combinations with fewer than 2 PPAs are excluded from the graph (dashed line segments indicate that the line is skipping over such years).

The graph reflects PV-only pricing, not PV+battery (PV+battery PPA prices are presented separately, in a later section).

You can explore this data interactively at https://emp.lbl.gov/pv-ppa-prices

Solar PPA prices are now often competitive with wind PPA prices, as well as the cost of burning fuel in *existing* gas-fired generators



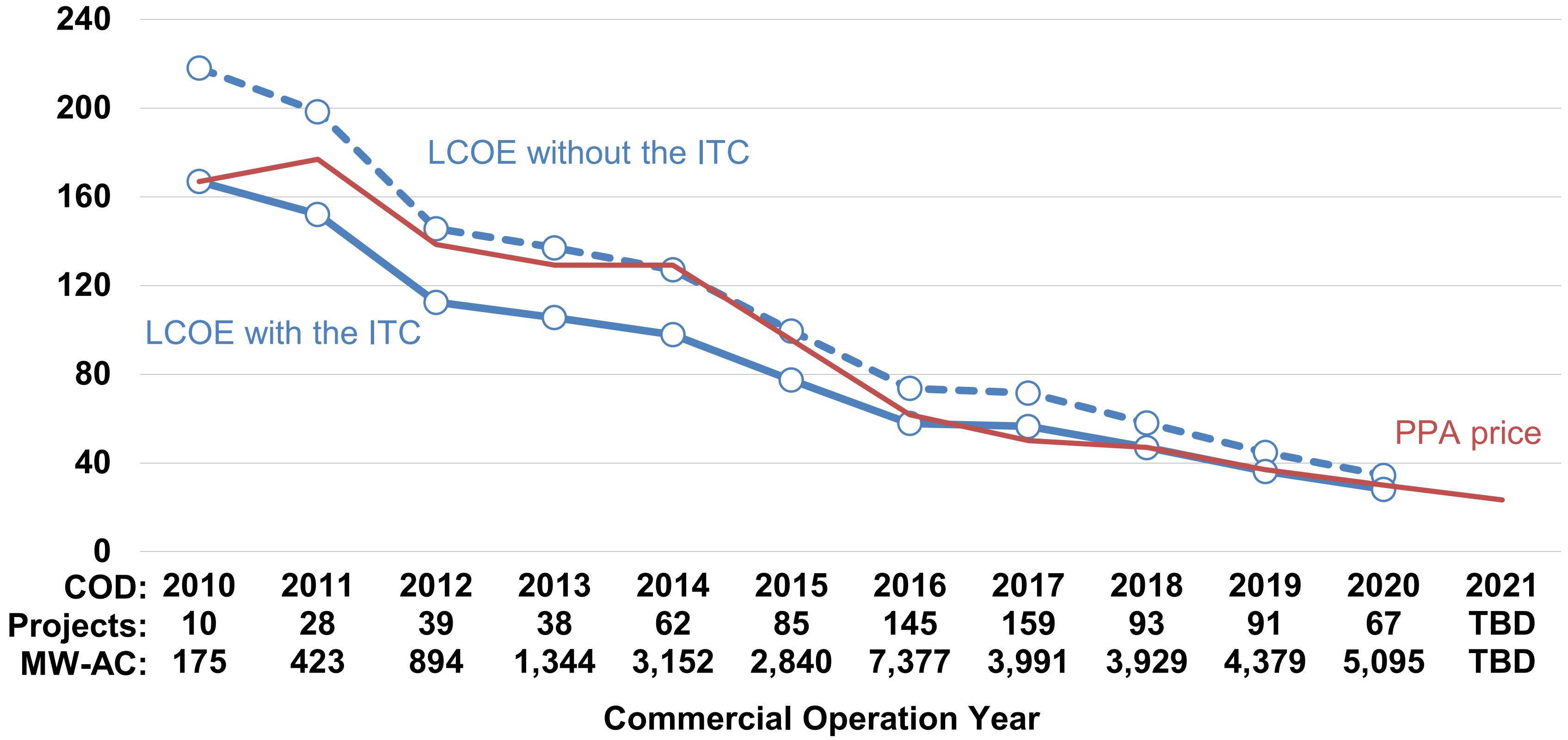


- Left graph shows that solar PPA prices have largely closed the gap with wind, and both are competitive with levelized gas price projections.
- Right graph compares recent solar PPA prices to range of gas price projections from AEO 2021. Although solar PPAs signed post-2017 are initially priced higher than the cost of burning fuel in an ***existing*** combined-cycle natural gas unit (NGCC), over longer terms PV is potentially more competitive (depending on what happens to the price of natural gas), and can help protect against fuel price risk.
- PV PPAs are priced to recover *both* capital *and* other ongoing operational costs—for an NGCC, this would add another ~$23-$49/MWh to fuel costs.

Levelized PPA prices track the LCOE of utility-scale PV

Sample: 817 projects totaling 33,599 MW_{AC}

Generation-Weighted Average LCOE and Levelized PPA Price (2020 $/MWh)

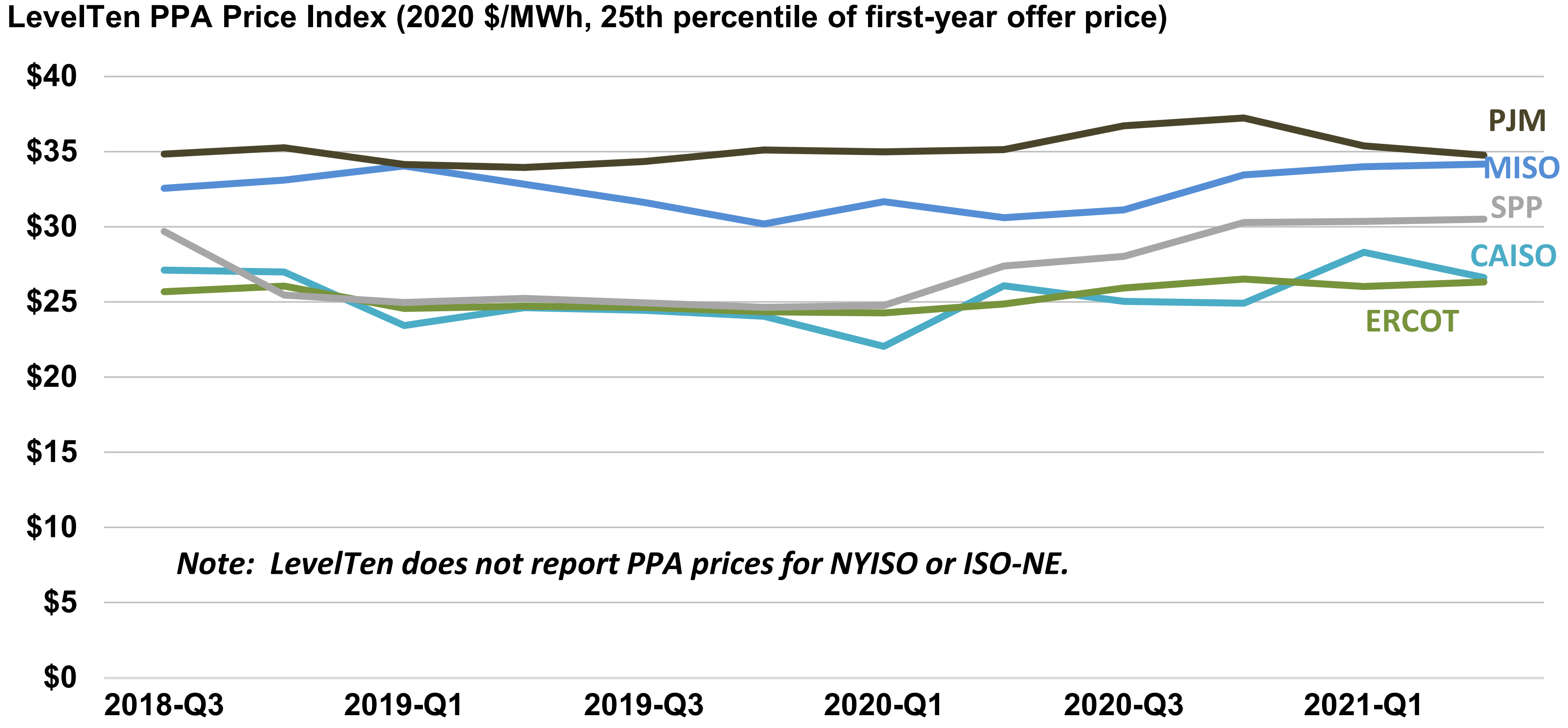


Prior LCOE graphs exclude the ITC, but here we graph LCOE both with and without the ITC, plotted against PPA prices by COD year (rather than by PPA execution date).

Levelized PPA prices fall within the range of the two LCOE curves over time, and since 2016 have closely tracked LCOE with the ITC, suggesting full pass-through of the credit and a competitive PPA market.

Also notable is the declining value of the ITC in $/MWh terms: while the credit has remained constant over time in percentage terms (at 30%), it has shrunk in $/MWh terms along with the CapEx to which it is applied.

LevelTen Energy utility-scale PV PPA price indices



To augment our PPA price sample, and to gain visibility into corporate PPA pricing (which is not well-represented within our empirical PPA sample), we present LevelTen Energy's PPA Price Index.

LevelTen pricing represents the 25th percentile of offers (levelization details unclear), rather than pricing from executed contracts.

In the five ISOs that LevelTen tracks, offer prices rose gradually throughout 2020, but have mostly stabilized so far in 2021.

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Wholesale Market Value

Wholesale market value analysis: data sets and methodology

We estimate the wholesale market value for each utility-scale PV project larger than 1 MW (as reported on Form EIA-860) and for distributed PV (DPV) capacity for each county (as reported on Form EIA-861). We then aggregate the project-level data as generation-weighted averages for all seven ISOs and ten additional balancing authorities.

We draw from project-level modeled hourly solar generation (using NREL's System Advisor Model and site- and year-specific insolation data from NREL's National Solar Radiation Database) and de-bias the generation by leveraging ISO-reported aggregate solar generation and plant-level reported generation by Form EIA-923.

Energy value is the product of hourly solar generation by plant or county and concurrent wholesale energy prices

- Plant-level debiased hourly solar generation
- Real-time energy price from nearest pricing node
- Focus on annual value of solar from all sectors

$$Energy\ Value = \frac{\sum Postcurtailment\ Generation_h * Wholesale\ RT\ Energy\ Price_h}{\sum Precurtailment\ Generation_h}$$

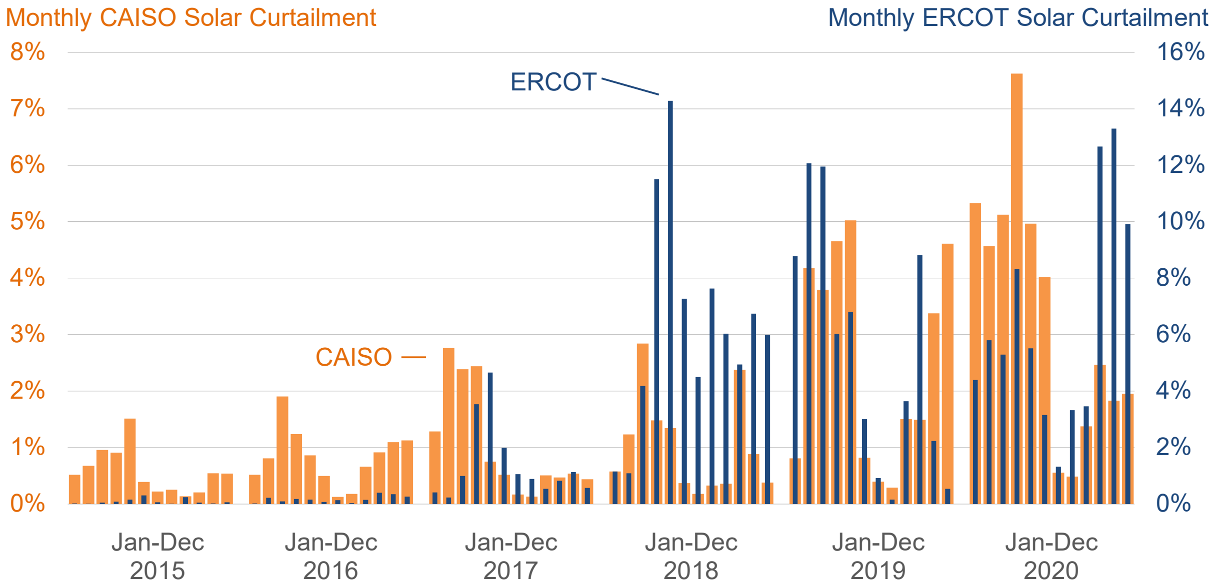
Capacity value is the product of a plant's or county's capacity credit and capacity prices

- Capacity credit based on plant-level profile; varies by month, season, or year
- Capacity prices from respective ISO region; prices vary by month, season, or year
- Estimate bilateral capacity prices for regions without organized capacity markets
- Focus on annual value of solar from all sectors
- Calculate capacity value for all solar, even if some solar does not participate in capacity markets

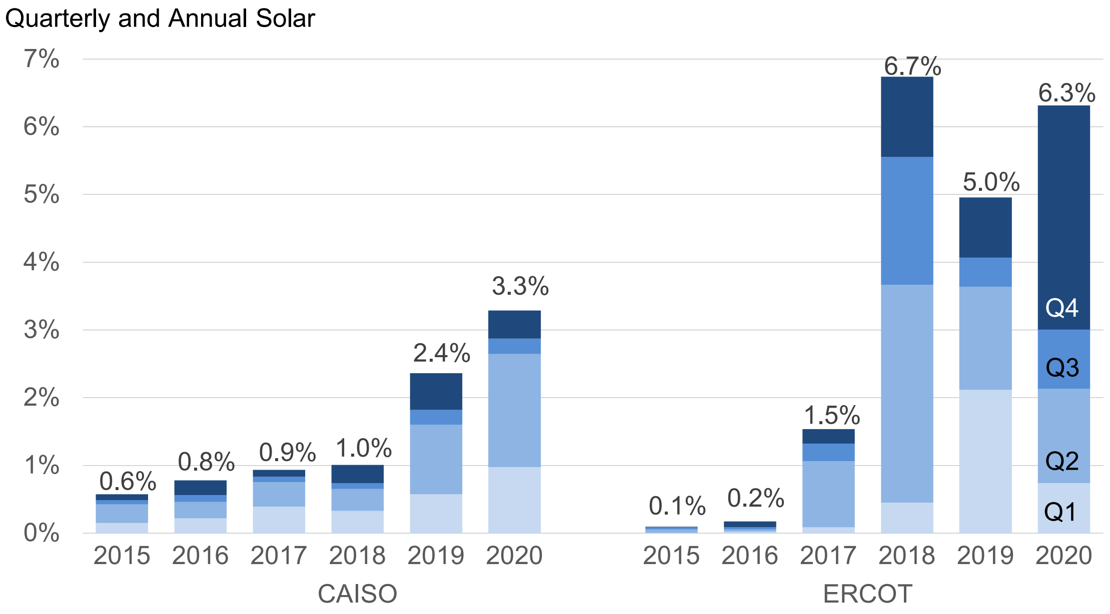
$$Capacity\ Value = \frac{\sum Capacity\ Credit_T * Nameplate * Capacity\ Price_T}{\sum Precurtailment\ Generation_T}$$

Total market value is simply the sum of energy and capacity value and does not include any potential additional revenue streams (ancillary market revenues, renewable energy credits, infrastructure deferral, resilience, energy security, or any other environmental or social values that are not already internalized in wholesale energy and capacity markets).

Only two of the seven ISOs currently report solar curtailment: CAISO and ERCOT



The orange columns represent curtailment in CAISO (left axis), the blue ones in ERCOT (right axis)



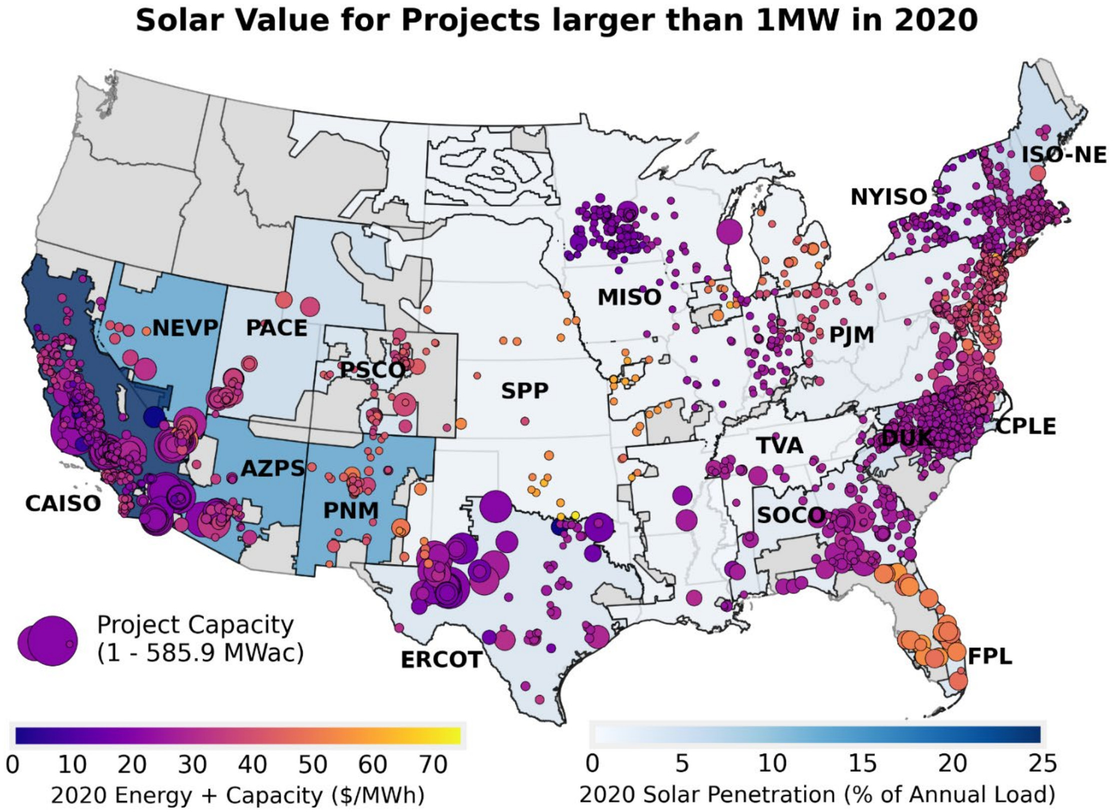
CAISO: 1,659 GWh of solar curtailed in 2020, equivalent to the annual output of a hypothetical 725 MW_{AC} PV project operating at an average CA capacity factor of 26.1% (which would have been 27.5% if not for curtailment).

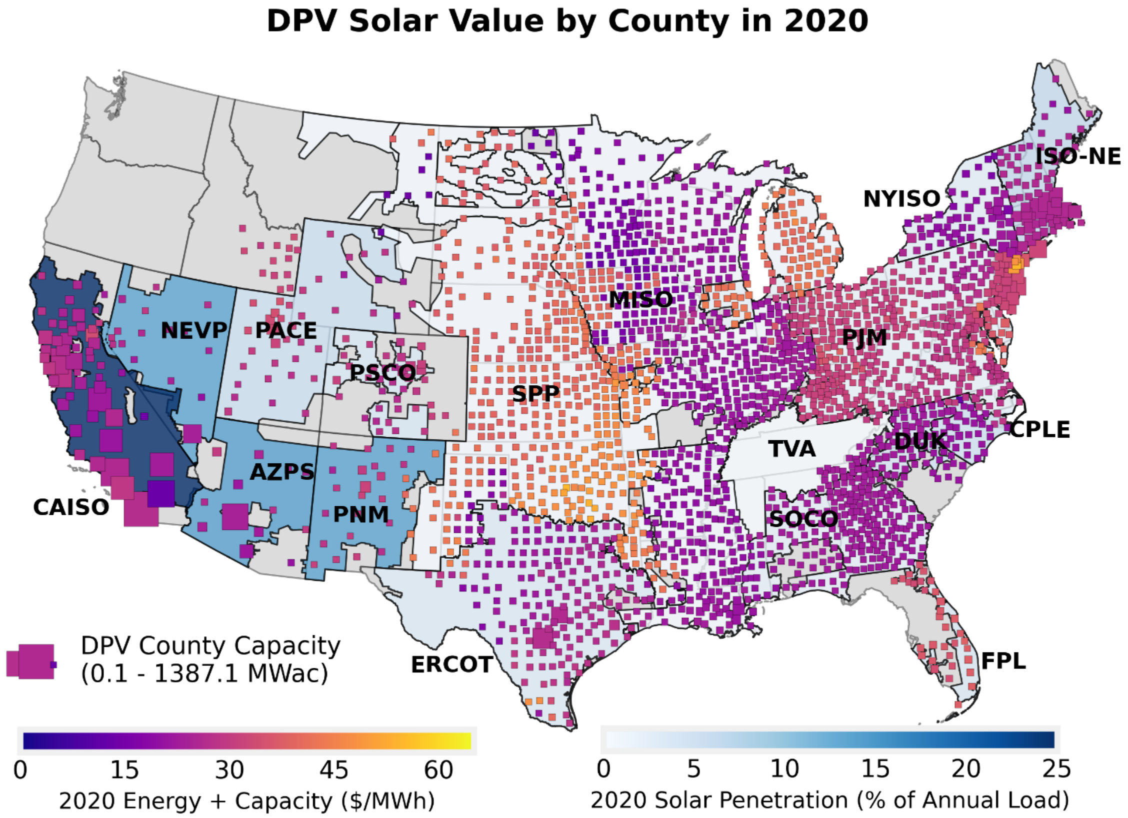
ERCOT: 671 GWh of solar curtailed in 2020, equivalent to the annual output of a hypothetical 385 MW_{AC} PV project operating at an average TX capacity factor of 19.9% (which would have been 21.5% if not for curtailment).

Much higher *rate of curtailment* in ERCOT (6.3%) than in CAISO (3.3%) in 2020, even though solar's penetration rate is far lower in ERCOT (3%) than CAISO (~23%).

For more information please refer to Berkeley Lab's Solar-to-Grid Publication:
https://emp.lbl.gov/renewable-grid-insights

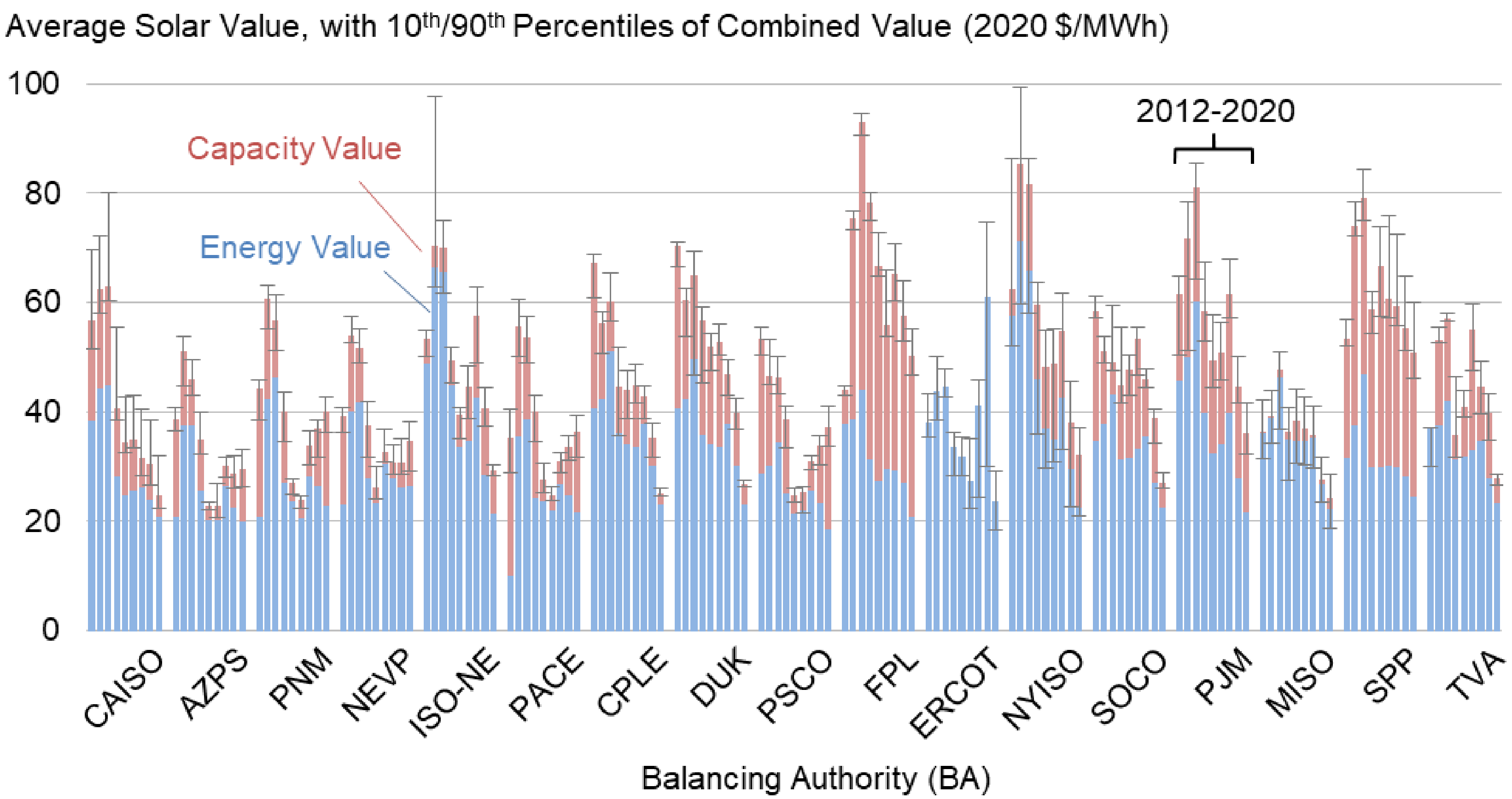
Solar's energy and capacity value varied by location





Solar’s value varies between regions (low in CAISO and MISO and high in SPP and FPL) and within regions (for example, western ERCOT has lower solar values than eastern ERCOT). Some markets showed very little variation in solar value in 2020 (value across ISO-NE differed by only 7%) while others had large discrepancies (values varied by up to 50% in ERCOT and NYISO).

Here we roll up the plant- and county-level estimates from the previous slide to regional averages (and also separate energy and capacity value)



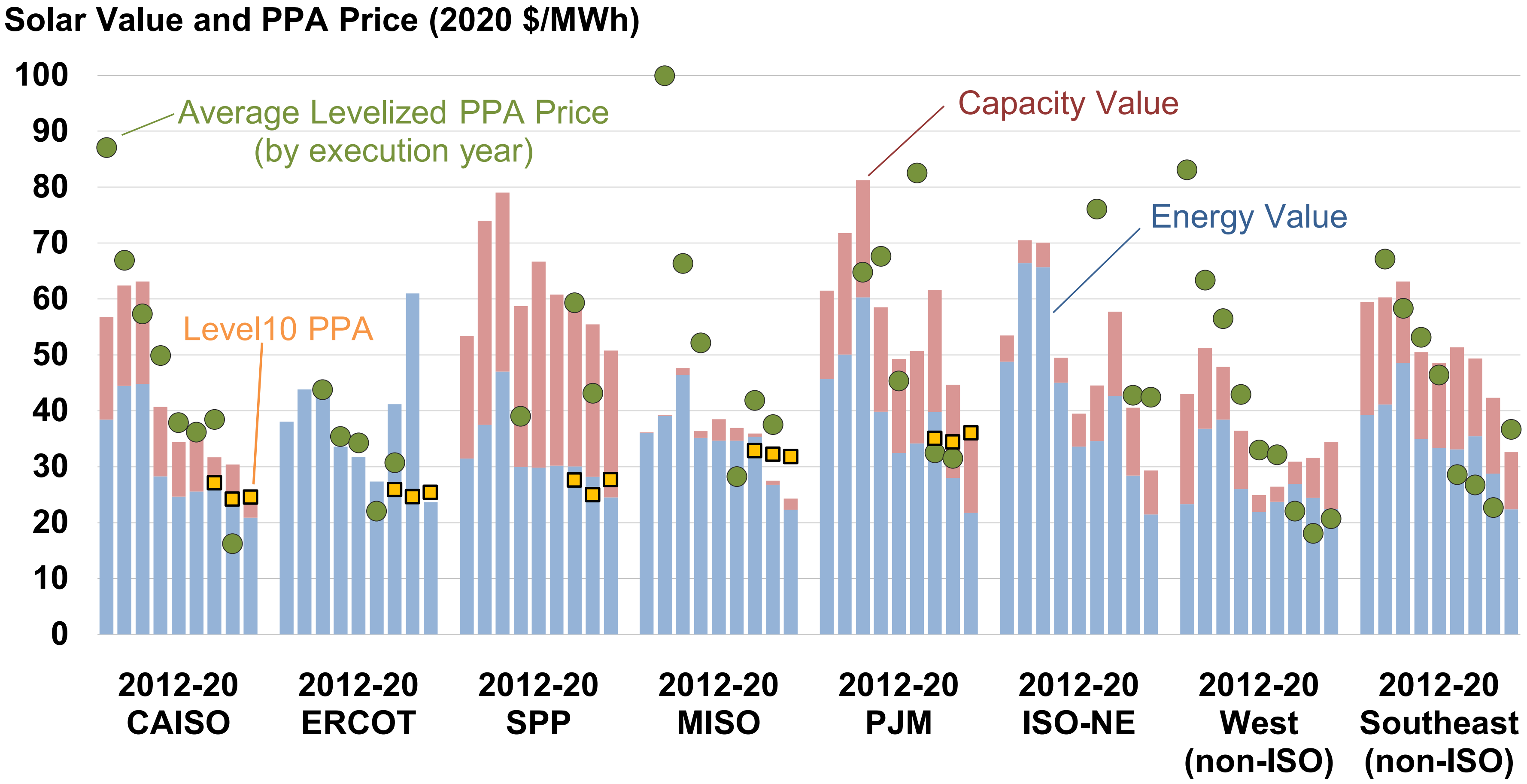
In 2020, market value was lowest in ERCOT ($23.7/MWh) and highest in SPP ($50.8/MWh).

The regional solar value is the generation-weighted average value of all distributed and utility-scale solar generation in a given balancing authority.

The energy value makes up the bulk of total market value, but capacity value is significant in eastern markets in particular.

Fluctuations across years mostly reflect fluctuations in wholesale power prices, but in CAISO, the visible decline in value over time also reflects increasing solar penetration.

In a subset of regions for which we have sufficient PPA sample, falling PPA prices have largely kept pace with declining solar value

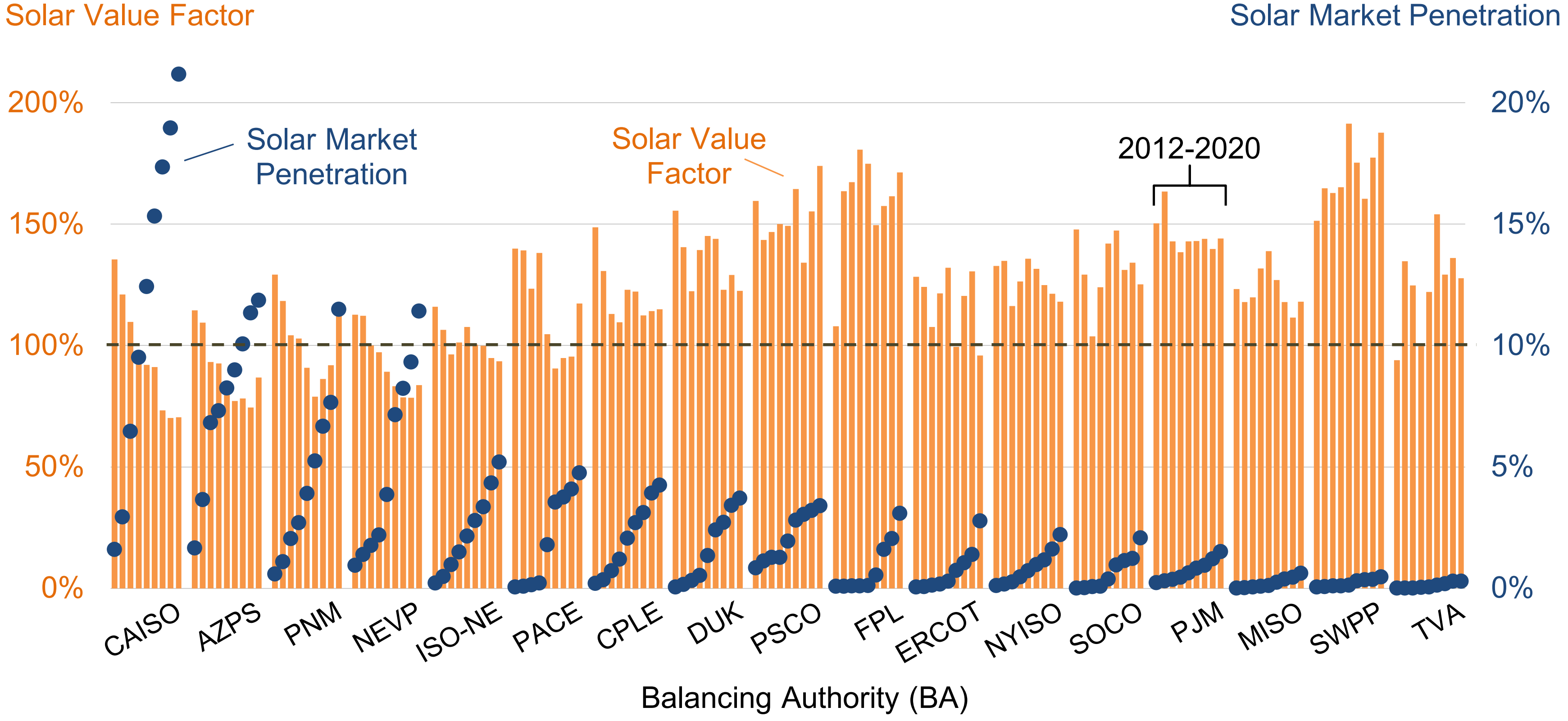


The green dots show the average levelized solar PPA price within each region among new contracts signed in each year as reported by Berkeley Lab, the yellow squares represent PPA price estimates by LevelTen. We do not have sufficient PPA data to present robust trends for each balancing authority.

While solar's market value within several of these regions has declined over time, falling PPA prices have largely kept pace, more or less maintaining solar's competitiveness.

For more information please refer to Berkeley Lab's Solar-to-Grid Publication: *https://emp.lbl.gov/renewable-grid-insights*

Solar provides below-average value in regions with high solar penetration rates



The columns represent the solar value factor (left axis), the dots show growth in solar market penetration (right axis)

The "Value Factor" is defined as the ratio of solar's total market value (both energy and capacity) to the market value of a "flat block" (i.e., a 24x7 block) of power.

It indicates whether the total revenue captured by solar is higher (>100%) or lower (<100%) than the average wholesale price across all hours.

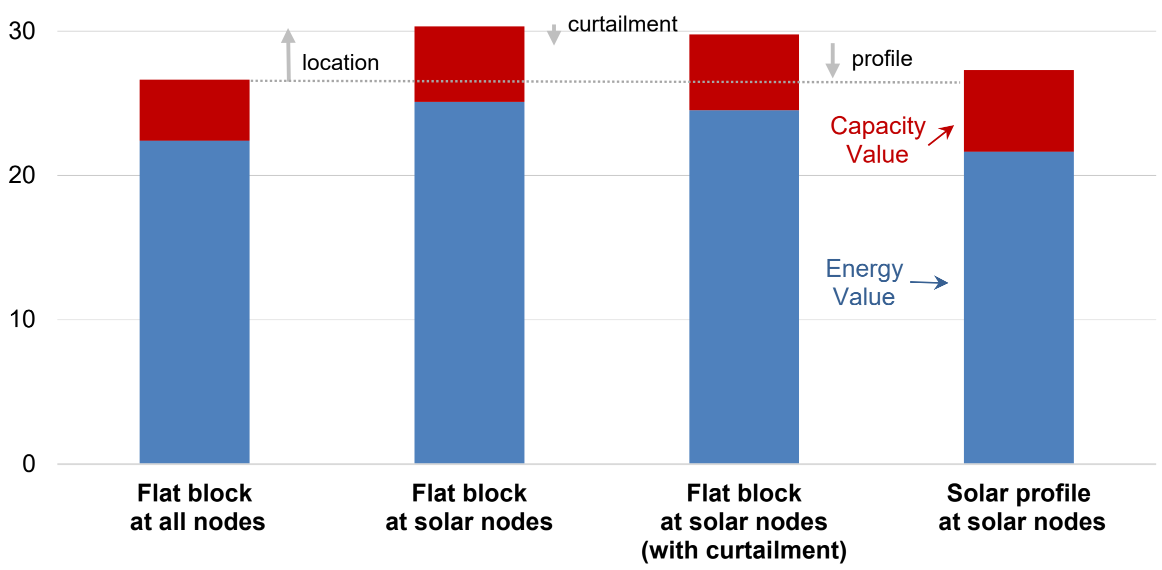
It controls for fluctuations in energy and capacity prices across years (and across ISOs), and focuses instead on the impact of solar's generation profile (and penetration) on value.

Regions with the highest solar penetration rates (CAISO, AZPS, PNM, NEVP, and ISO-NE) all show Value Factors less than 100% (except PNM).

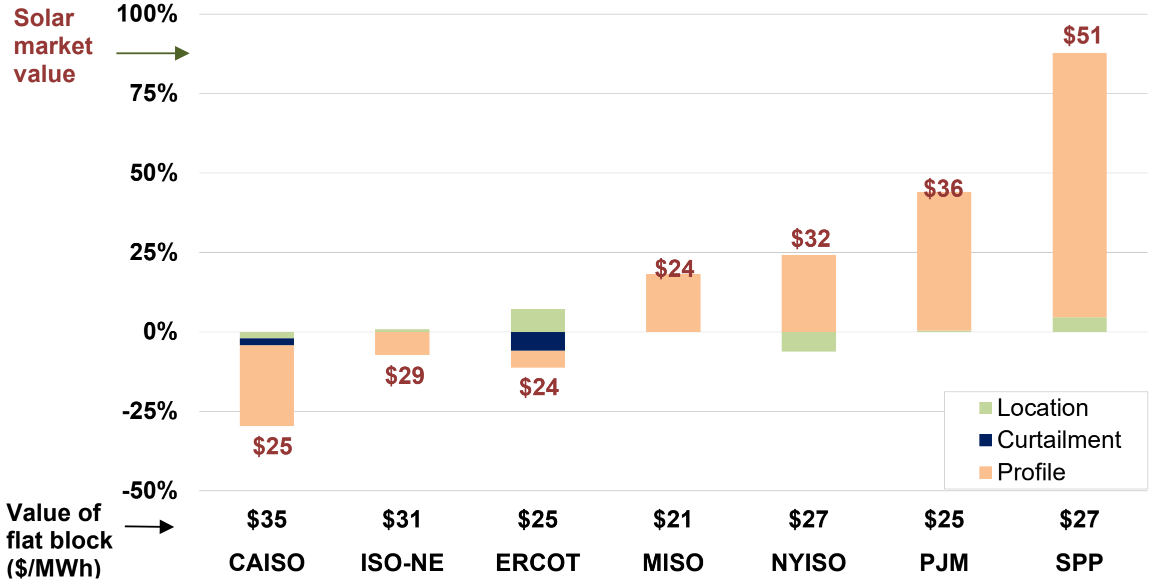
For more information please refer to Berkeley Lab's Solar-to-Grid Publication:
https://emp.lbl.gov/renewable-grid-insights

Solar's generation profile is the largest source of value differences between solar and flat block in 2020

Wholesale Market Value in 2020 (2020 $/MWh)



Solar Value Relative to Flat Block Value (% difference)



On a national average basis, solar's relative value is enhanced by project location but hurt by solar's generation profile (and, to a lesser extent, by curtailment).

With the exception of ERCOT (where the location of solar plants is the largest driver of relative value), solar's generation profile either hurts (in CAISO and ISO-NE) or helps (in MISO, NYISO, PJM, and SPP) solar's value the most (relative to a flat block).

For more information please refer to Berkeley Lab's Solar-to-Grid Publication:
https://emp.lbl.gov/renewable-grid-insights

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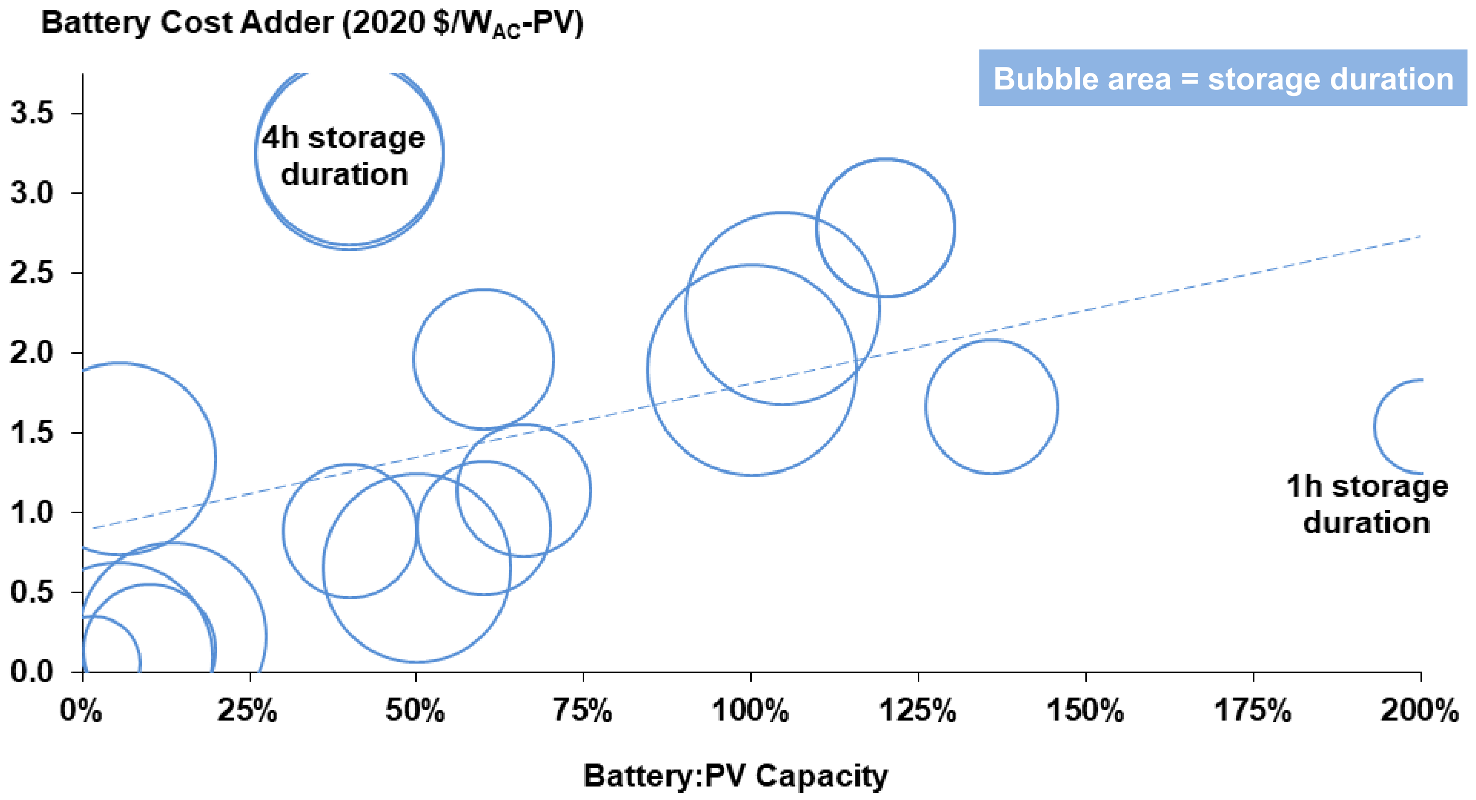
PV+Battery Hybrid Plants

For PV+battery hybrid plants, the battery cost adder scales with increased storage capacity and duration

Sample: 18 projects totaling 180 MW_{AC} of PV, 116 MW_{AC} of battery capacity, and 392 MWh of battery energy, with CODs from 2017-2019

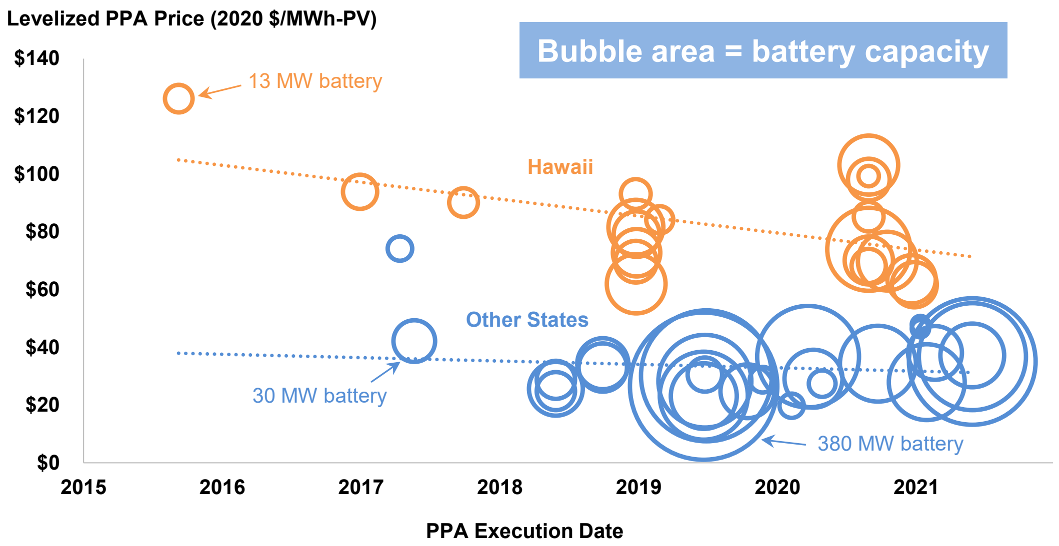


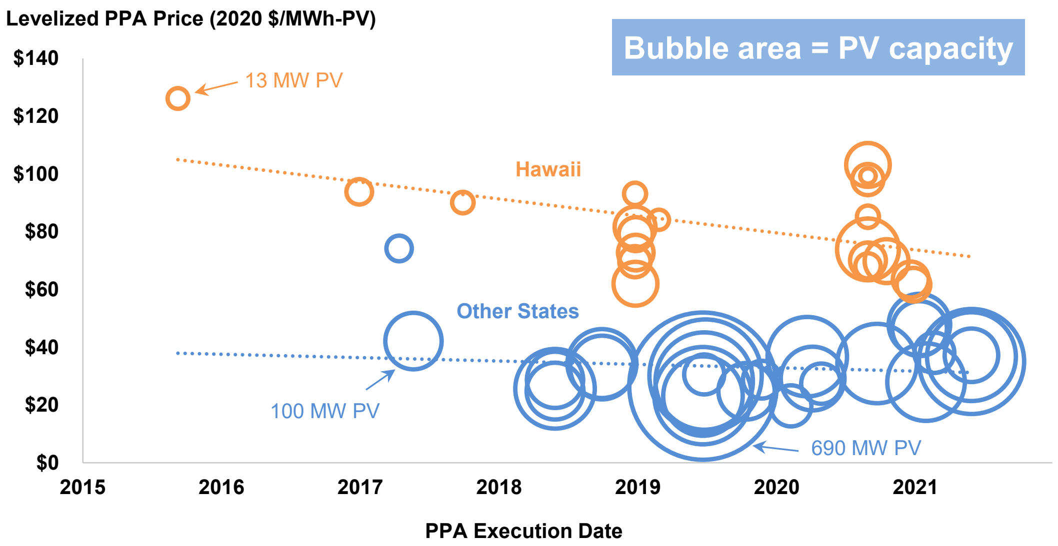
Empirical cost sample for utility-scale PV+battery hybrid projects is still very thin, and does not include 2020.

The median reported battery costs among 11 projects with a 2019 COD was $1,100/kWh, representing a median cost adder of $1.54/$W_{AC}$-PV, or 48% of overall hybrid project installed costs.

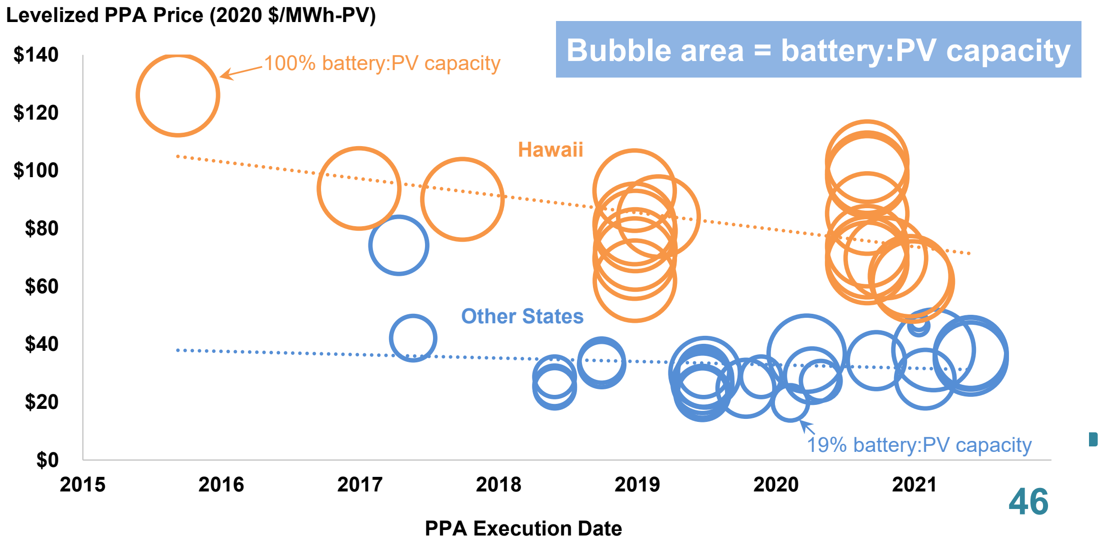
Within this 2019 COD sample, the median battery capacity is 60% of the PV capacity and can release energy at rated power for a little more than 2 hours.

PPA prices for PV+battery hybrids have declined over time; Hawaii priced at a premium





- All three graphs show the same data from a sample of 47 PPAs (totaling 5.4 GW_{AC} of PV and 3.1 GW_{AC} of battery); the only difference is what the bubble size represents
- Downward trend over time, particularly in HI, but refinement is complicated by multi-dimensionality of these plants; “Other States” (in blue) are more heterogeneous than HI in terms of solar resource
- Battery:PV capacity ratio always at 100% in HI; lower on the mainland
- Battery duration ranges from 2-8 hours; 44 of the 47 plants shown have durations ≥4 hours (other three are 3.8, 2, and 2 hours)



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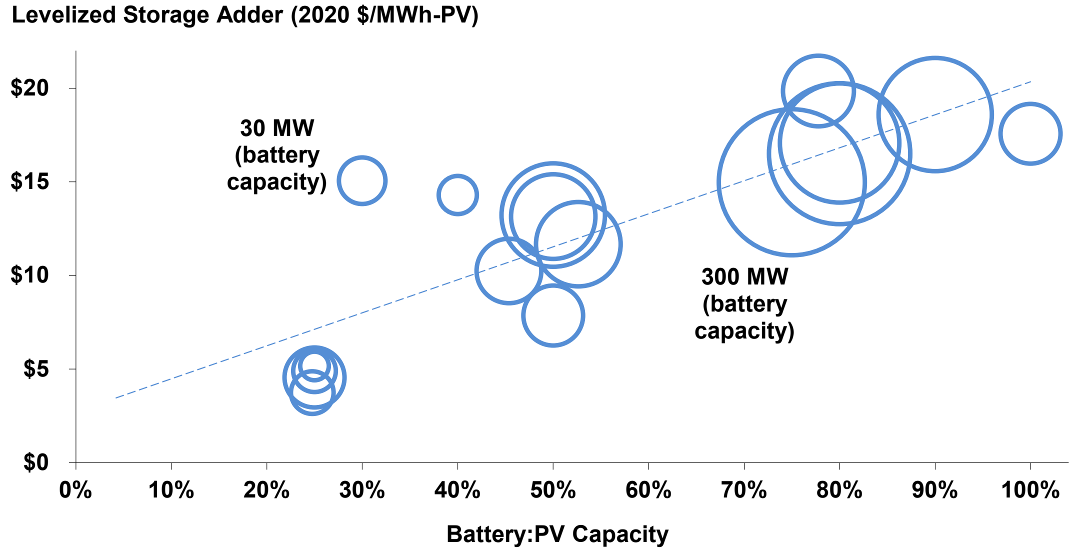
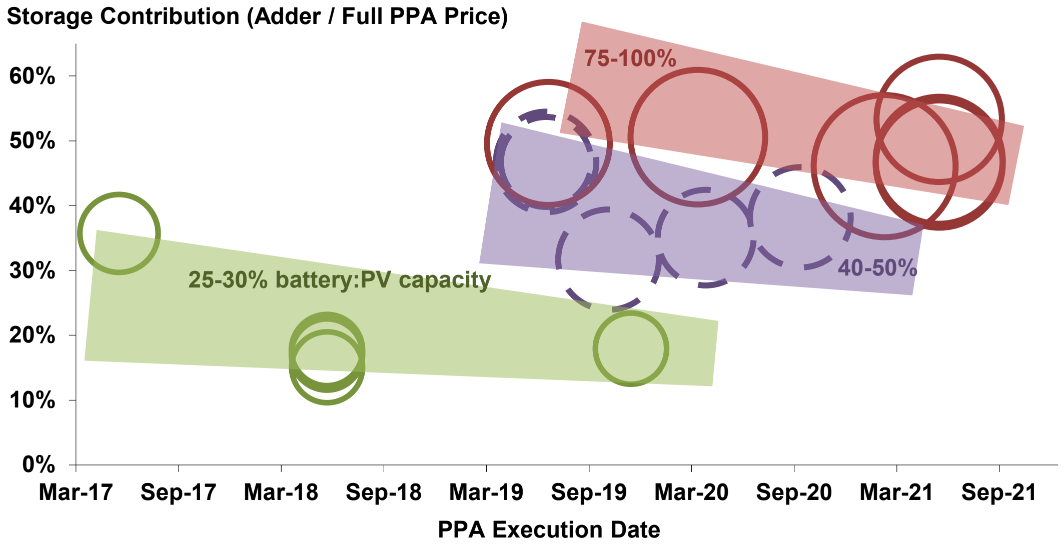
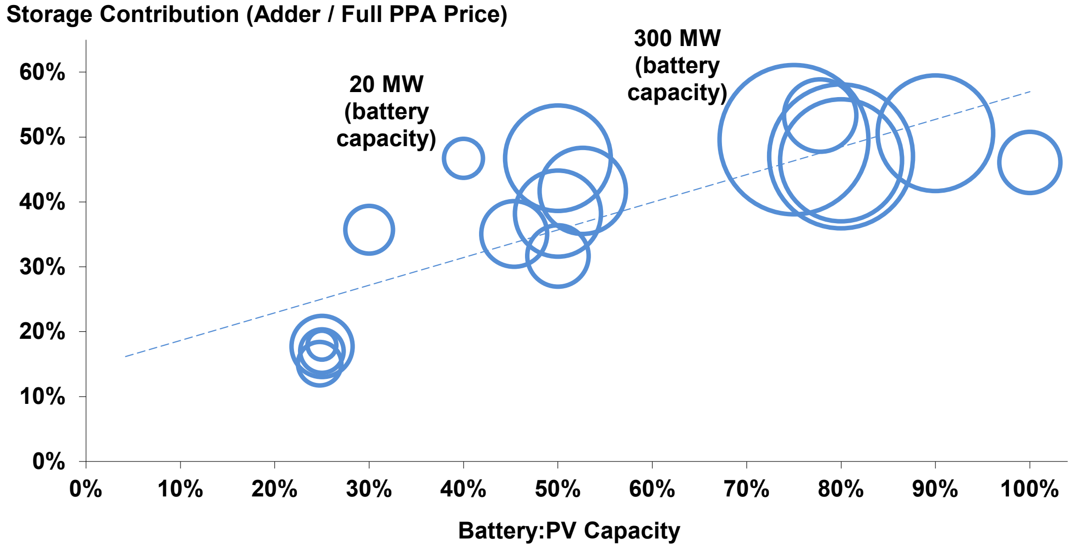
PPAs that price the PV and storage separately enable us to calculate a "levelized storage adder"—which depends on the battery:PV capacity ratio







- The "levelized storage adder"—*expressed in the top-left graph in $/MWh-PV, not $/MWh-stored*—increases linearly with the battery:PV capacity ratio: ~$5/MWh-PV at 25% battery:PV capacity, ~$10/MWh at 50%, ~$20/MWh at 100%
- Bottom-left graph presents the storage adder as a percentage of the full PPA price (i.e., storage's contribution to the overall price)
- Top-right graph shows storage's contribution holding fairly steady, and a trend toward larger battery:PV capacity, over time
- All batteries depicted on this slide have a 4-hour storage duration

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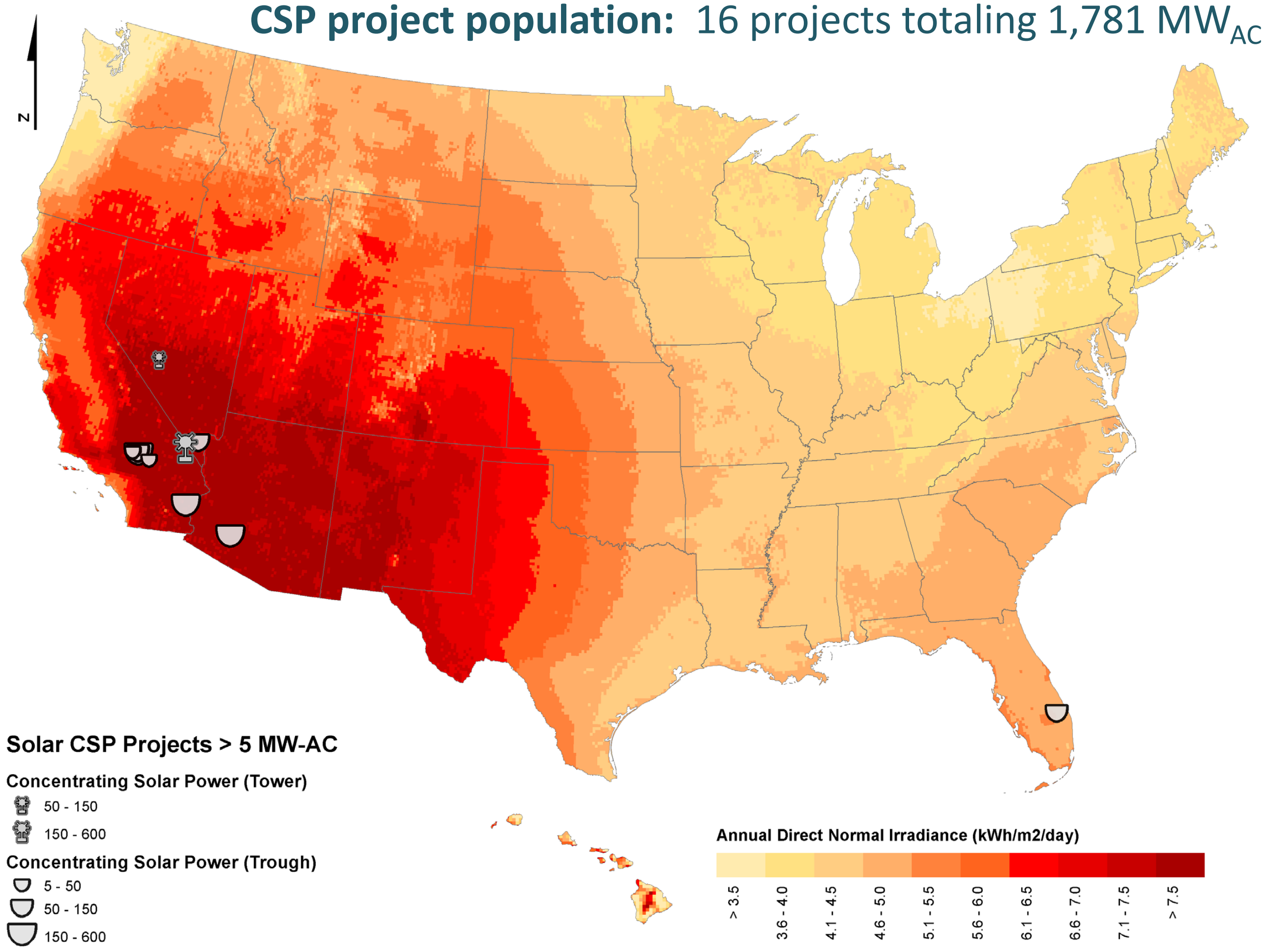
Concentrating Solar Thermal Power (CSP) Plants

Sample description of CSP projects

CSP project population: 16 projects totaling 1,781 MW_{AC}



After nearly 400 MW_{AC} built in the late-1980s (and early-1990s), no new CSP was built in the U.S. until 2007 (68 MW_{AC}), 2010 (75 MW_{AC}), and 2013-2015 (1,237 MW_{AC}).

Prior to the large 2013-15 build-out, all utility-scale CSP projects in the U.S. used parabolic trough collectors.

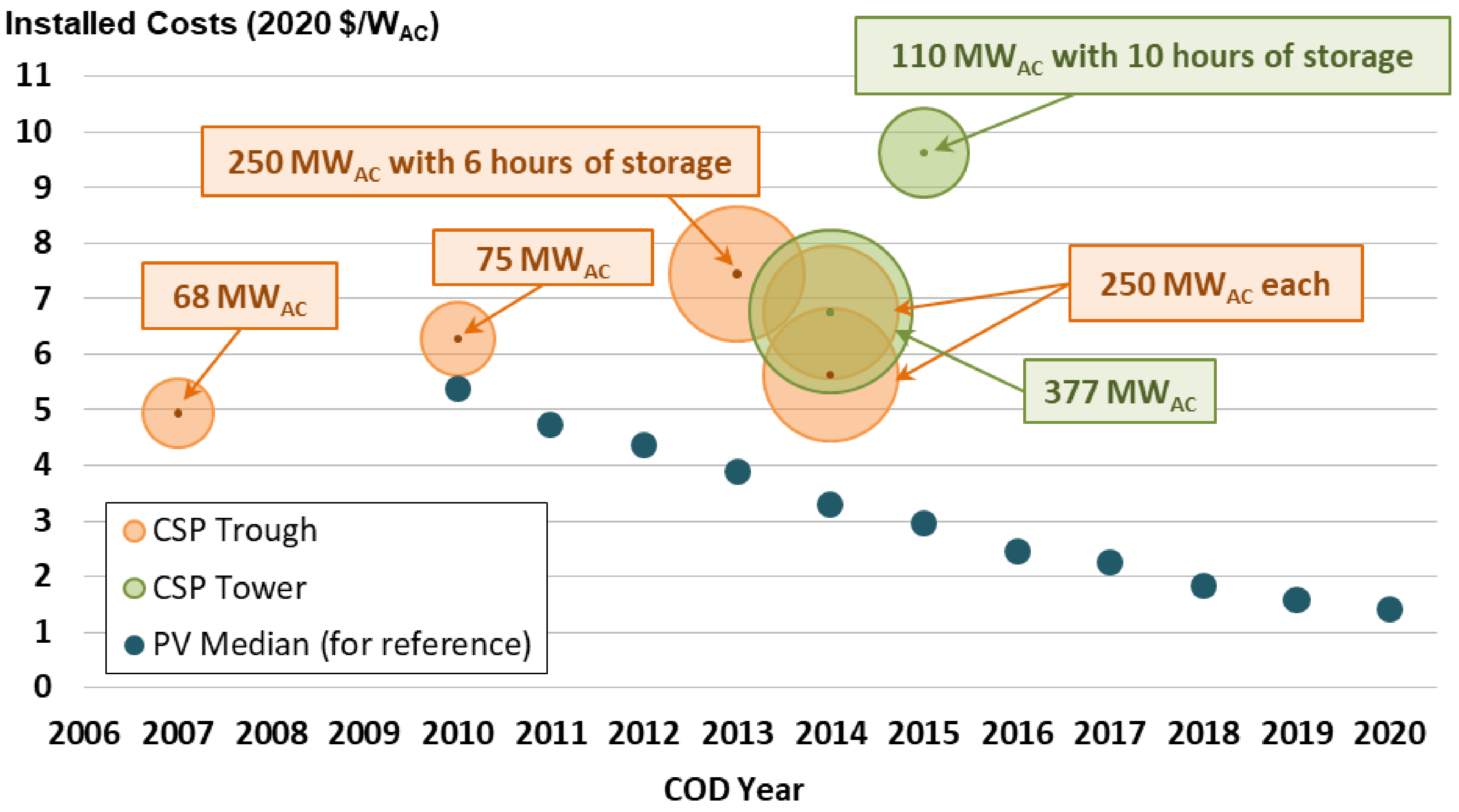
The five 2013-2015 projects include:

– 3 parabolic troughs (one with 6 hours of storage) totaling 750 MW_{AC} (net) and

– 2 “power tower” projects (one with 10 hours of storage) totaling 487 MW_{AC} (net).

Not much movement in the installed costs of CSP

CSP cost sample: 7 projects totaling 1,381 MW_{AC}

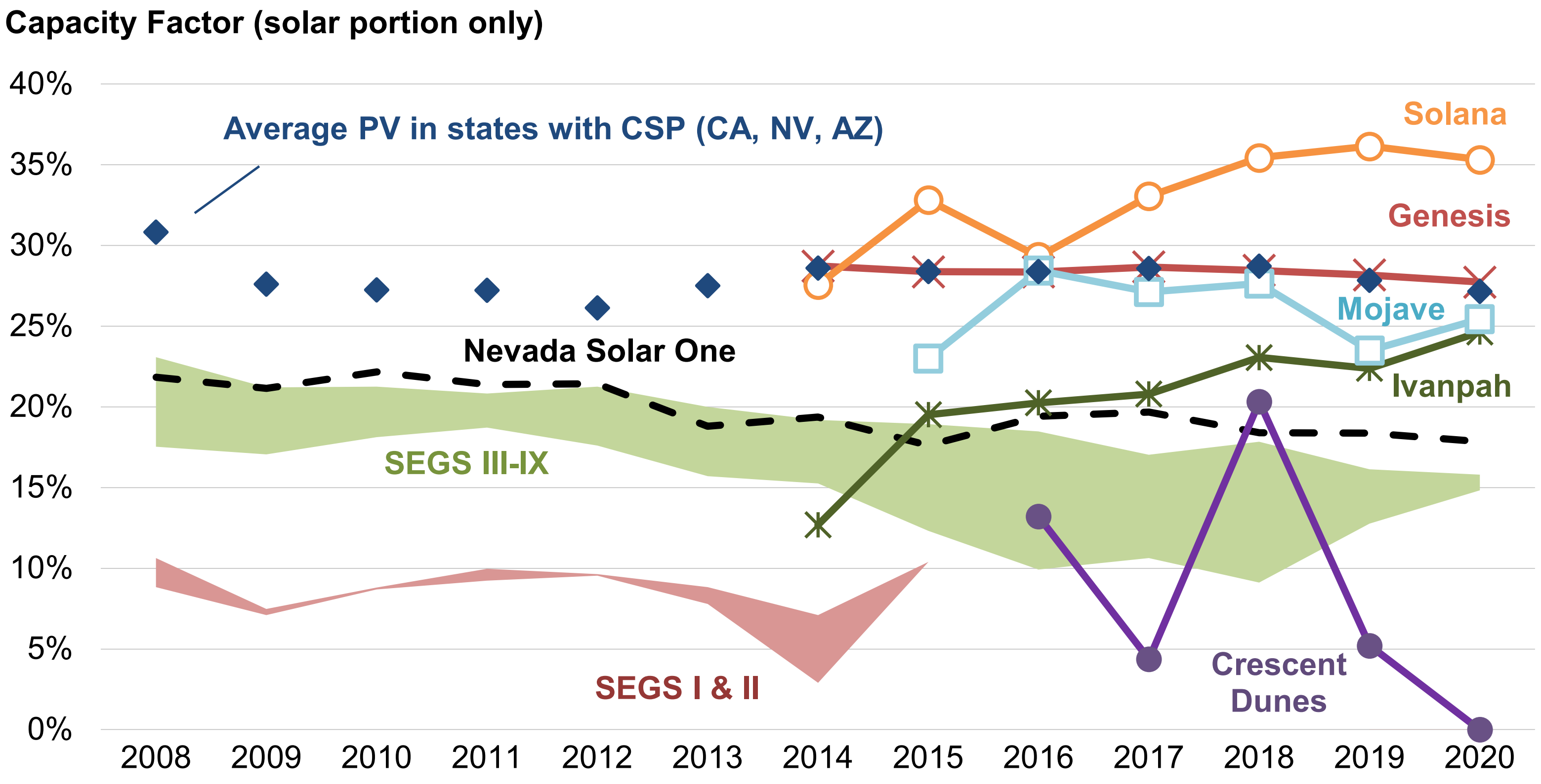


Small sample of 7 projects using different technologies makes it hard to identify trends. Newer projects (5 built in 2013-15) did not show cost declines, though some included storage or used new technology (power tower).

PV costs have continuously declined and are now far below the historical CSP costs. While international CSP projects seem to be more competitive with PV, no new CSP projects are currently under active development in the U.S.

Despite improvements, most newer CSP projects continue to underperform relative to long-term expectations

CSP price sample: 7 projects totaling 1,381 MW_{AC}



Power Towers: Ivanpah (377 MW) had its best year yet in 2020 (though still below long-term expectations of ~27%), while Crescent Dunes (110 MW with 10 hours of storage) ceased to operate following a late-2019 PPA cancellation and subsequent bankruptcy.

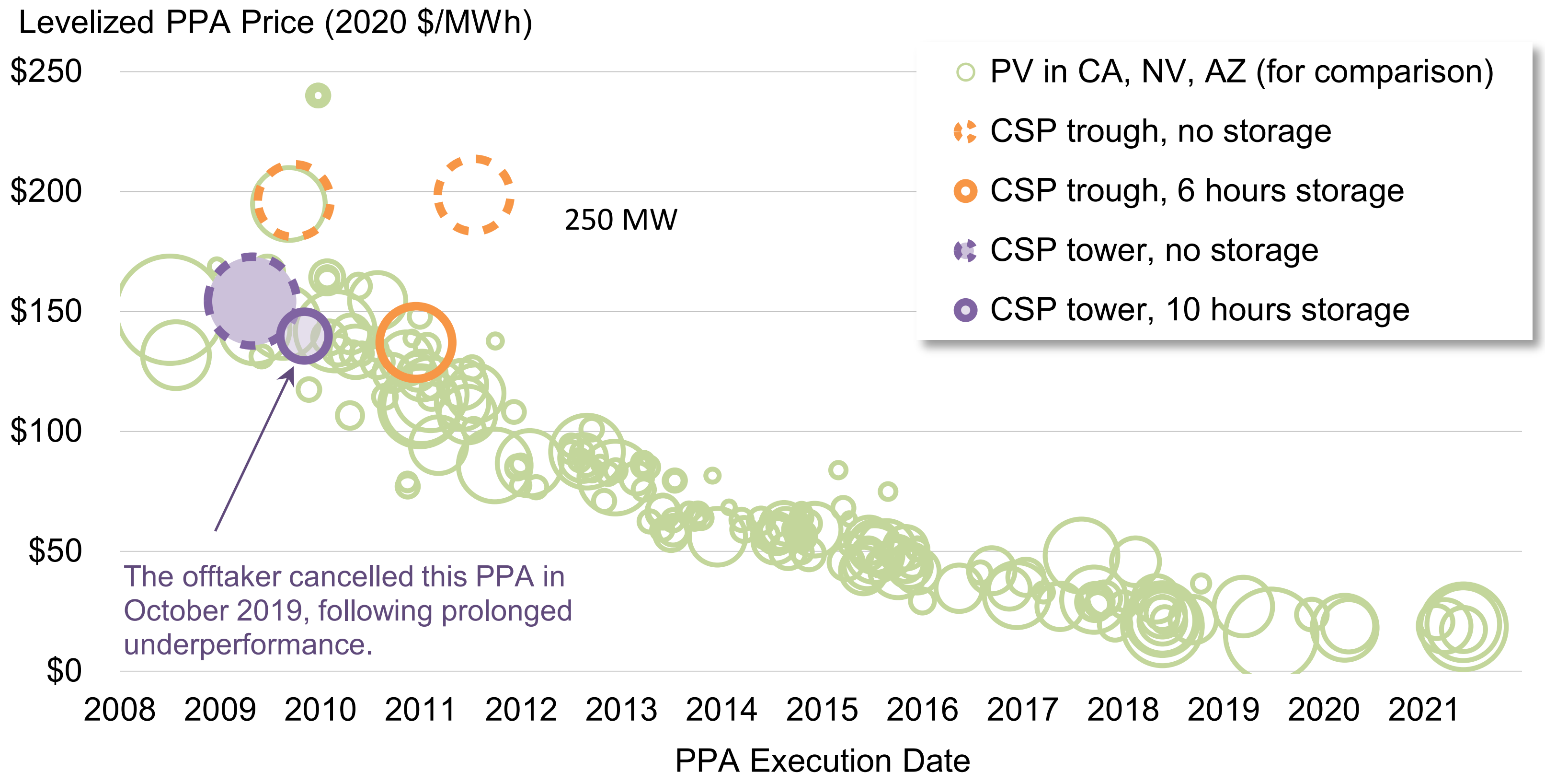
Trough with storage: Solana (250 MW trough project with 6 hours of storage) seems to have leveled off around 35%, below long-term expectations of >40%.

Troughs without storage: Genesis continued to match expectations in 2020, while Mojave has been more variable. Both have performed better than the old SEGS projects (now decommissioned and being partially repowered with PV), and the 2007 Nevada Solar One project.

Only Solana and Genesis have matched or exceeded the average capacity factor among utility-scale PV projects across CA, NV, and AZ.

Though once competitive, CSP PPA prices have failed to keep pace with PV's PPA price decline

CSP price sample: 7 projects totaling 1,381 MW_{AC}



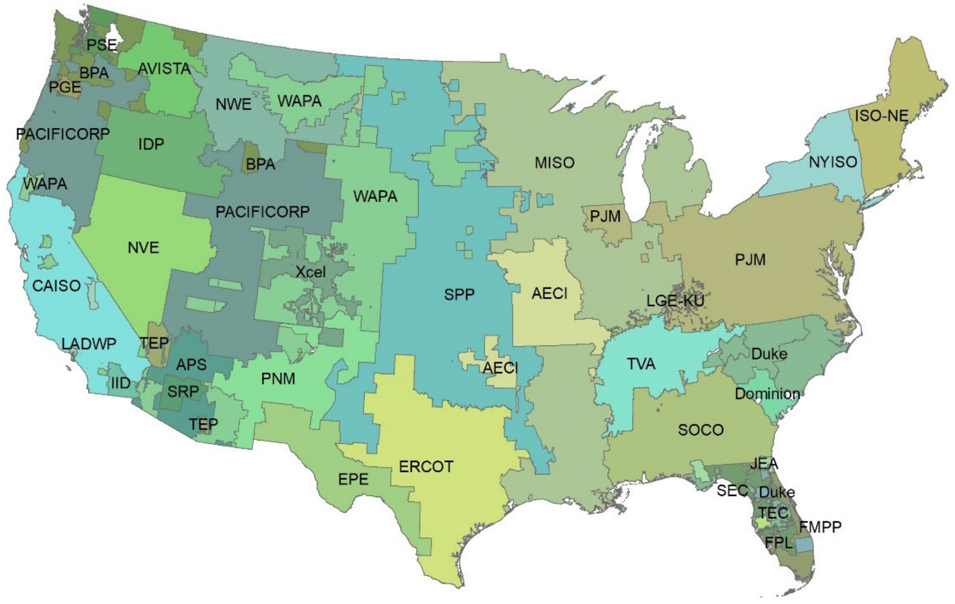
When PPAs for the most recent batch of CSP projects (with CODs of 2013-15) were signed back in 2009-2011, they were still mostly competitive with PV.

But CSP has not been able to keep pace with PV's price decline. Partly as a result, no new PPAs for CSP projects have been signed in the U.S. since 2011 – though the technology continues to advance overseas.

Capacity in Interconnection Queues

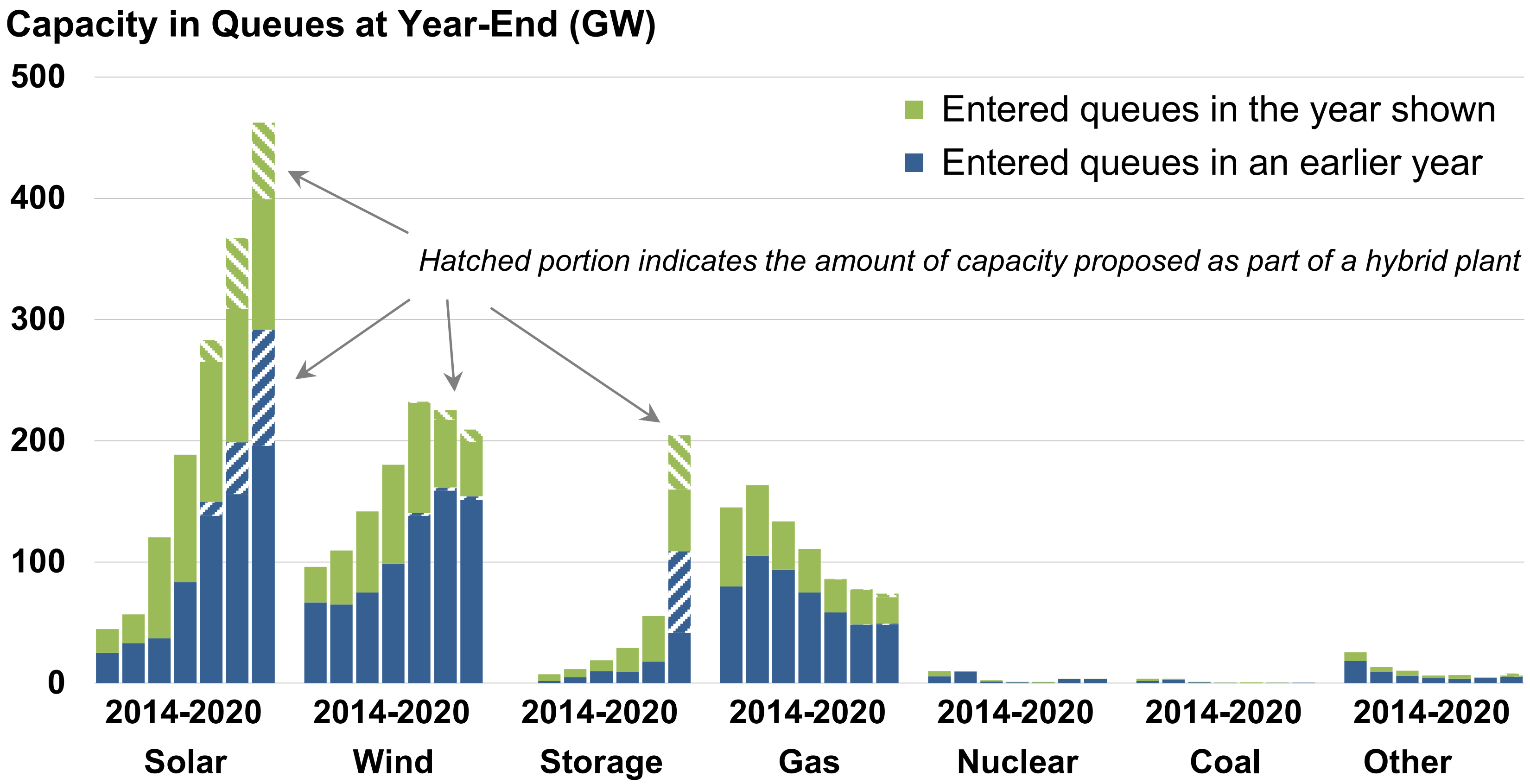
Scope of generator interconnection queue data

- Data compiled from **interconnection queues** for 7 ISOs and 35 utilities, representing ~85% of all U.S. electricity load
  - Projects that connect to the bulk power system: not behind-the-meter
  - Includes all projects in queues through the end of 2020
  - Filtered to include only "active" projects: removed those listed as "online," "withdrawn," or "suspended"
- Hybrid / co-located projects were identified and categorized
  - Storage capacity for hybrids (i.e., broken out from generator capacity) was not available in all queues
- Note that being in an interconnection queue does not guarantee ultimate construction: majority of plants are not subsequently built
- More queue data and analysis are available at: *https://emp.lbl.gov/publications/queued-characteristics-power-plants*



Coverage area of entities for which data was collected
Data source: Homeland Infrastructure Foundation-Level Data (HIFLD)

Looking ahead: Strong growth in the utility-scale solar pipeline



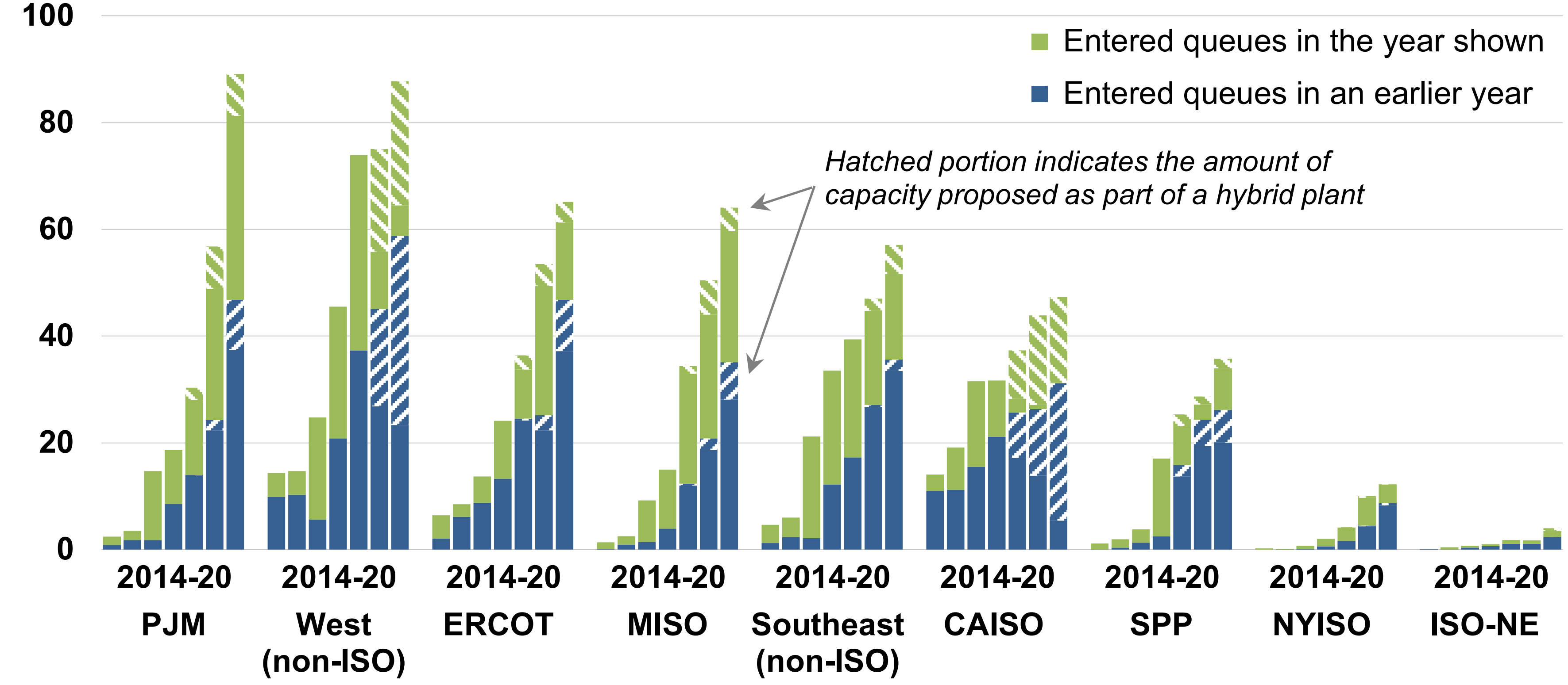
460 GW of solar was in the queues at the end of 2020—170 GW of this total entered the queues in 2020 (the remainder entered in earlier years, and remain active)

Nearly 160 GW of the 460 GW of solar in the queues (i.e., 34%) includes a battery in a PV hybrid configuration

Solar (both standalone and in hybrid form) is by far the largest resource within these queues, roughly equal to the amount of wind, storage, and natural gas combined

Graph shows solar and other capacity in 42 interconnection queues across the US:
Not all of these projects will ultimately be built!

Looking ahead: Continued broadening of the market



The growth of solar within these queues is widely distributed across almost all regions of the country, with PJM and the non-ISO West leading the way with nearly 90 GW_{AC} each, followed by ERCOT, MISO, and the non-ISO Southeast, each with ~60 GW_{AC}

Nearly 90% of the solar capacity in CAISO's queue at the end of 2020 was paired with a battery; in the non-ISO West, that number is also relatively high, at 67%

- Both regions are grappling with "duck curve" issues due to solar's relatively high market share

Graph shows solar capacity in 42 interconnection queues across the US:
Not all of these projects will ultimately be built!

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Summary

Data Summary

- Utility-scale PV continued to lead solar deployment in 2020, with Texas adding the most new capacity. 81% of new projects and 89% of new capacity feature single-axis tracking.
- The median installed cost of projects that came online in 2020 fell to $1.4/W$_{AC}$ ($1.1/W$_{DC}$), down 10% from 2019 and 75% from 2010.
- Average capacity factors range from 19% in the least-sunny regions to 30% where it is sunniest. Single-axis tracking adds roughly five percentage points to capacity factor in the regions with the strongest solar resource. Fleet-wide performance has declined at ~1.2%/year.
- Not including the ITC, the median LCOE from utility-scale PV has declined by 85% since 2010, to $34/MWh in 2020. Levelized PPA prices have kept pace, and—with the benefit of the ITC—currently range from $20/MWh in CAISO and the non-ISO West to $30-$40/MWh elsewhere.
- In higher-penetration markets like CAISO, the market value of solar has been declining, but falling PPA prices have largely kept pace, preserving solar's net value.
- There has been much interest in hybridization (pairing PV with batteries). Our public data file includes metadata on >150 PV+battery projects that are operating or planned in 23 states. Some of these PV+battery hybrid projects have inked PPAs in the mid-$20/MWh range.
- Across all 7 ISOs and 35 additional utilities, there were 460 GW of solar in interconnection queues at the end of 2020. More than a third of this proposed solar capacity is paired with battery storage, with the highest concentration of these PV+battery hybrid plants in CAISO and non-ISO West.

Data and Methods

Summary of Data and Methods (1)

Much of the analysis in this report is based on primary data, the sources of which are listed below (along with some general secondary sources) by data set. We collect data from a variety of unaffiliated and incongruous sources, often resulting in data of varying quality that must be synthesized and cleaned in multiple steps before becoming useful for analytic purposes. In some cases, we essentially create new and useful data by piecing together various snippets of information that are of less consequence on their own.

Technology Trends: Project-level metadata are sourced from a combination of Form EIA-860, FERC Form 556, state regulatory filings, interviews with project developers and owners, and trade press articles. We independently verify much of the metadata—such as project location, fixed-tilt vs. tracking, azimuth, module type—via satellite imagery. Other metadata are indirectly confirmed (or flagged, as the case may be) by examining project performance—e.g., if a project's capacity factor appears to be an outlier given what we think we know about its characteristics, then we dig deeper to revisit the veracity of the metadata.

Installed Costs: Project-level CapEx estimates are sourced from a combination of Form EIA-860, Section 1603 grant data from the U.S. Treasury, FERC Form 1, data from applicable state rebate and incentive programs, state regulatory filings, company financial filings, interviews with developers and owners, trade press articles, and data previously gathered by NREL. CapEx estimates for projects built from 2013-2019 have been cross-checked against confidential EIA-860 data obtained under a non-disclosure agreement (and we expect to receive similar data for 2020 projects and successive years going forward). The close agreement between the confidential EIA data and our other sources in most cases provides comfort that our normal data collection process (i.e., the process that we go through prior to receiving the confidential EIA data with a one-year lag) does, in fact, yield reputable CapEx estimates. That said, we do caution readers to focus more on the overall trends rather than on individual project-level data points.

Capacity Factors: We calculate project-level capacity factors using net generation data sourced from a combination of FERC Electric Quarterly Reports, FERC Form 1, Form EIA-923, and state regulatory filings. Because many projects file data with several of these sources, we are often able to cross-reference (and correct, if needed) odd-looking data across several sources, thereby providing higher confidence in the veracity of the data.

Summary of Data and Methods (2)

PPA Prices: We gather PPA price data from a combination of FERC Electric Quarterly Reports, FERC Form 1, Form EIA-923, state regulatory filings, company financial filings, and trade press articles. We only include a PPA within our sample if we have high confidence in all of the key variables such as execution date, starting date, starting price, escalation rate (if any), time-of-day factor (if any), and term. By this process of exclusion, there is very little chance for erroneous PPA price data to enter our sample. Instead, this winnowing process results in our PPA price sample being somewhat smaller than it might otherwise be—though we are typically able to add back in any "incomplete" PPAs in subsequent years, once more data have become available with the passage of time.

LCOE: Our project-level LCOE calculations draw upon the empirical project-level data presented throughout this report, including CapEx and capacity factors, and are supplemented with assumptions about financing and other items, as described in more detail in earlier slides.

Market Value: We draw from project-level modeled hourly solar generation (using NREL's *System Advisor Model* and site- and year-specific insolation data from NREL's *National Solar Radiation Database*) and de-bias the generation leveraging ISO-reported aggregate solar generation and plant-level reported generation by EIA 923.

Energy value is the product of hourly solar generation by plant (utility-scale) or county (distributed PV) and the wholesale hourly real-time energy prices of the nearest node (for ISOs) or the system-wide energy price (other Balancing Authorities).

Capacity value relies on the same reported and constructed generation profiles as does energy value to assess the "capacity credit" of solar according to each ISO's rules in place at the time (for Balancing Authorities we examine the historical plant-level performance over the top 100 load hours over the past 3 years). We then multiply the resulting capacity credit by historical zonal capacity prices to arrive at capacity value.

For more information, see Berkeley Lab's forthcoming publication: "Solar-to-Grid: Trends in System Impacts, Reliability, and Market Value in the United States with Data Through 2020." *https://emp.lbl.gov/renewable-grid-insights*

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For more information

Explore this report deck, a written technical brief, an extensive workbook with all underlying data, and interactive visualizations: http://utilityscalesolar.lbl.gov

Download all of our other solar and wind work at: http://emp.lbl.gov/reports/re

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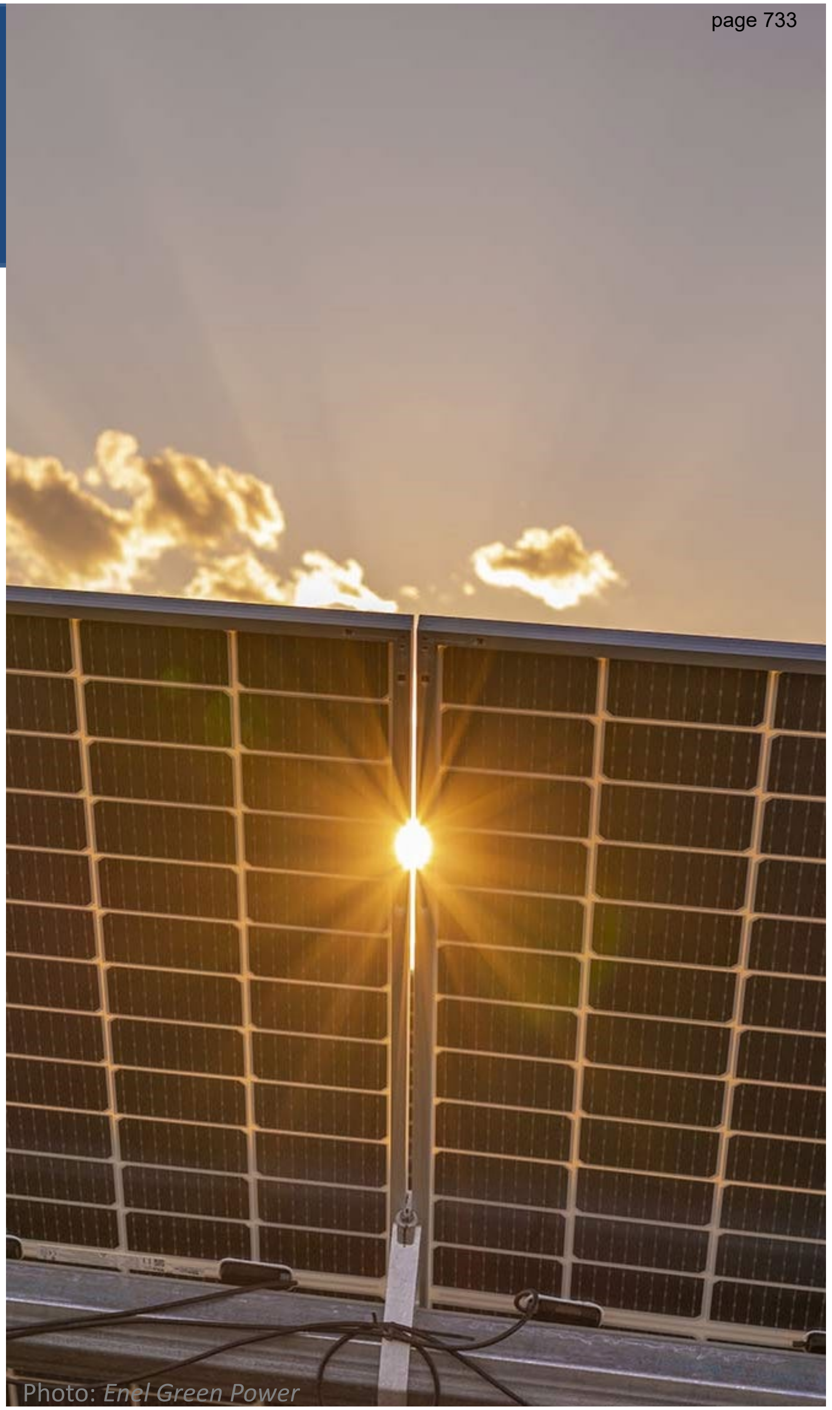
Photo: *Enel Green Power*

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In the Matter of:)
Approval of the 2021-2022)
Personal Property Manual)

NOTICE OF DECISION

Appearances

Jeffrey Mitchell, Deputy Director, Division of Local Government Services, appeared on behalf of the Department of Taxation.

Summary

The matter of the approval of the Personal Property Manual required to be published by the Department of Taxation pursuant to NAC 361.1365 came before the Nevada Tax Commission (Commission) for hearing in Carson City, Nevada, on May 4, 2020 after due notice to Assessors and to the public. Pursuant to NAC 361.1365, the Department previously held a public workshop on April 28, 2020 to disclose all proposed modifications to the Manual and to receive information from the public.

The Commission reviewed the 2021-2022 Personal Property Manual and the report of the Department.

DECISION

The Commission, having considered all evidence and testimony pertaining to the matter, hereby adopts the 2020-2021 Personal Property Manual as presented by the Department, pursuant to NAC 361.1365(2).

BY THE NEVADA TAX COMMISSION THIS 4th DAY OF MAY, 2020.

Melanie Young

Melanie Young, Executive Director

cc: County Assessors
David Pope, Chief Deputy Attorney General

NEVADA DEPARTMENT OF TAXATION

Division of Local Government Services

PERSONAL PROPERTY MANUAL:

VALUATION GUIDELINES

2021-2022

Division of Local Government Services

Personal Property Manual: Valuation Guidelines 2021-2022

Department of Taxation
Division of Local Government Services
1550 College Parkway, Suite 144
Carson City, NV 89706
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Adopted by
Nevada Tax Commission on 05/04/2020

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2021-22 PERSONAL PROPERTY MANUAL: VALUATION GUIDELINES

INTRODUCTION

2021-22 PERSONAL PROPERTY MANUAL – VALUATION GUIDELINES

The schedules presented herein are interpretive guidelines for use by county assessors to establish taxable value, pursuant to the requirements of NRS 361.227(4) and NAC 361.1365 and 361.1375.

CLASSIFICATION OF PROPERTY

Personal property is defined in NRS 361.030, and includes (j) "all property of whatever kind or nature, except vehicles as defined in NRS 371.020, not included in the term "real estate." Real estate is defined in NRS 361.035, and includes land, houses, buildings, fences, ditches, structures,[1] erections, railroads, other improvements, and property rights. Real property is further defined in NAC 361.11715 as land, fixtures, improvements; on-site enhancements; and any rights, interests, benefits and privileges belonging or attached to the land.

NRS 361.333 requires that each major class of property be examined to determine whether there is equality of assessment. Uniformity and equality of assessment thus depend on proper classification. Although NRS 361.035 defines real estate and NRS 361.030 defines personal property, in practice it is sometimes difficult to tell whether an item is personal or real property. As the Attorney General stated in Opinion #41 (1963), "the classification depends on the facts of each particular case." The assessor is encouraged to consult the Division of Local Government Services and/or the District Attorney in difficult cases.

All references to statutes and regulations may be found in Appendix A of this Manual.

EXEMPT PROPERTY

NRS 361.050 through NRS 361.187 provide exemptions for assorted types of eligible property, including household goods; business inventories; property in transit; property owned by government entities, charitable organizations or veterans; and fine art for display.

Additionally, NRS 361.228(1) provides that

All intangible personal property is exempt from taxation, including, without limitation:

(a) Shares of stock, bonds, mortgages, notes, bank deposits, book accounts such as an acquisition adjustment and credits, and securities and chooses in action of like character; and

(b) Goodwill, customer lists, contracts and contract rights, patents, trademarks, trade names, custom computer programs, copyrights, trade secrets, franchises and licenses.

A complete discussion of exemptions and a cross-reference table is included in Appendix D of this manual.

[1] Structures include self-supporting structures other than buildings which carry gravity loads and resist the effects of earthquakes. They are generally not designed for continuous human occupancy and may be open to the environment, part of landscape design elements, or part of infrastructure systems (transport, water, energy). Examples of non-building structures include silos, chimneys, stacks, cooling towers, bins and hoppers, amusement structures, and monuments. *See American Society of Civil Engineers, "Minimum Design Loads for Buildings and Other Structures;" Revision of ASCE Standard 7-98, SEI/ASCE 7-02, 2nd Edition, Section 9.14, Nonbuilding Structures, p. 186. See also Bachman, Robert and Susan Dowty, "Nonstructural Component or Nonbuilding Structure," originally published in Building Safety Journal (April-May, 2008).*

PROCEDURES FOR DETERMINING TAXABLE VALUE

To calculate the taxable value of personal property, NAC 361.1371 and NAC 361.1375 require the assessor to determine four input values:

- Acquisition cost
- Acquisition year
- Expected life, and
- Cost conversion factor

The personal property declaration submitted by the taxpayer pursuant to NRS 361.265 should list the acquisition cost for each item and the year acquired. The declaration should also contain sufficient information to identify each item's industry classification (NAICS code), property type, and corresponding expected life.

Acquisition Cost

For personal property mobile or manufactured homes, acquisition cost means replacement cost when new, which equals the retail selling price to the original owner. For other types of personal property including billboards, acquisition cost means the actual cost of property to its present owner. For all personal property, acquisition cost includes any expense required to place the asset into service except sales tax--including all charges for transportation, installation, accessories, and profit and overhead, as well as additions to or renovations of the property other than routine maintenance or repairs. Observe, however, that the cost of manufactured homes does not include appurtenant improvements like outbuildings, decks, or paving. The assessor should value these separately as real property and depreciate as appropriate.

Should a taxpayer fail to file a valid personal property declaration or sufficient data is not otherwise available for the assessor to establish acquisition cost, NRS 361.265 authorizes the assessor to make an estimate of the value of the property. NAC 361.139 further requires the assessor to estimate its acquisition cost using any nationally recognized valuation technique. Because NRS 361.265(5) defines failure to file a declaration as a misdemeanor, assessors should advise taxpayers to file complete, accurate, and timely personal property declarations. In addition, if the reported acquisition cost appears inconsistent with market data, the assessor may request documentation for the cost reported and may pursue penalties for perjury if necessary.

Acquisition Year

For mobile and manufactured homes the acquisition year equals the year of the sale to the original owner, which often corresponds to the manufacturer's model year. For all other personal property the acquisition year equals the year the current owner purchased or leased the property. Observe that the acquisition year remains constant at the year first sold for manufactured homes but resets to the year acquired each time billboards or equipment change owners.

Expected life

The Life Expectancy Guidelines section assigns typical asset lives to each major industrial classification grouped by NAICS code. For example, all industries classified as *Agriculture and Forestry (NAICS .11)* have 15 year lives, while *Mining (NAICS .21)* assigns a 20 year life to *Oil and Gas Exploration (NAICS .2111)* and a 15 year life to *Mining (NAICS .2121 & .2122)*.

Certain items within industries appear separately as Itemized Equipment with specific lives that may differ from the industry norm. For example, *Agriculture and Forestry* industries with a typical 15 year life expectancy also use specialized equipment whose asset lives equal 7, 10 or 20 years. To improve accuracy, assessors should employ the itemized equipment lives whenever they can assign a specific life expectancy to a particular item.

Having identified the industry classification for the subject account the assessor then assigns its appropriate NAICS code and corresponding expected lives to its assets. *See discussion on NAICS below for current requirements.*

Readers may also use the alphabetical listing of personal property by general type found in the Index of this Manual to locate the appropriate expected life for individual items. Because some industries use similar types of business equipment, like desks or computers, readers should select the NAICS classification that best describes the subject account.

Besides these NAICS Life Expectancy Guidelines, the Personal Property Manual also contains a Special Properties section with descriptions and asset life tables for:

- Short-life property subject to rapid obsolescence;
- Items similar to real property classified as personal, like mobile and manufactured homes or billboards;
- Generic business equipment found across many industries, like furniture and trade fixtures or computers; and
- Specialized assets like high-tech medical diagnostic equipment whose economic lives differ substantially from industry norms.

Cost Conversion Factors

Based on the acquisition cost, acquisition year and expected life for an item, the assessor should select the appropriate Cost Conversion Factor from the tables published in the Personal Property Manual.

Cost Conversion Factors contain three components: Cost Index, Age and Percent Good. To satisfy the requirement of NAC 361.375(2) the department develops Paasche indexes for manufactured homes, billboards, and business equipment derived from pertinent Marshall Swift comparative cost multiplier tables, the West Urban, All Items CPI index, and the PPI Index for Capital Equipment, Stage of Processing. These indexes inflate replacement cost new expressed in acquisition year nominal dollars into replacement cost new expressed in current year nominal dollars.

Cost indexes do not apply to mobile and manufactured homes first sold prior to July 1, 1982, whose taxable value always equals 20% of their original selling price. Cost indexes for equipment and billboards do not accrue beyond their expected lives; such items have a constant residual cost conversion factor equal to their residual percent good multiplied by the residual year cost index.

To comply with NAC 361.130(2)(b), however, cost indexes do apply to mobile and manufactured homes first sold on or after July 1, 1982. Even though mobile homes fully depreciate after sixteen years, applying the cost index to the years between the current year minus 16 and 1982 may actually produce a temporary increase in taxable value.

NAC 361.1375(4)&(5) specify declining balance depreciation with a 5% residual (salvage value) for all property types except manufactured homes and billboards, which use straight line depreciation. Unless the Department has conducted a market study or has otherwise obtained information which indicates a different residual amount, the Department currently relies on a double declining balance method for all equipment and a 5% residual; 5% per year depreciation with a 20% residual for mobile homes (16 year life), and 1.5% per year depreciation with a 25% residual for billboards (50 year life).

Percent good equals (1 - accrued depreciation) for the given asset age, where age equals the current year (first year of the biennium) minus the acquisition year. For the 2015-16 fiscal year for example, an asset acquired in 2005 has an age of seven years, a manufactured home first sold in 1992 has an age of twenty years. Although one could calculate depreciation directly, the tables reduce this process to a simple lookup.

To calculate taxable value using the Personal Property Manual, the assessor completes three steps:

- Select the appropriate expected life table,
- Look up the cost conversion factor for the given acquisition year and,
- Multiply the acquisition cost by the indicated cost conversion factor.

As usual, assessed value equals 35% of taxable value.

A NOTE ON NAICS

The North American Industry Classification System (*NAICS)* replaced the Standard Industrial Classification (SIC) in 1997. NAICS is based on a production-oriented concept, meaning that it groups establishments into industries according to similarity in the processes used to produce goods or services.

NAICS in the United States was designed for statistical purposes. However, NAICS is frequently used for various administrative, regulatory, contracting, taxation, and other non-statistical purposes.

For additional information and complete tables, readers may consult the US Census Bureau website http://www.census.gov/eos/www/naics/

The Department highly recommends assessors use the NAICS code on each personal property account. Use of the NAICS code will assist in the proper valuation of property pursuant to this Personal Property Manual because the NAICS code identifies the type of industry engaged in by the taxpayer.

In addition, the NAICS code is now a required component on the Statistical Analysis of the Roll Reports required by the Department in NRS 361.390 (3) in order to keep track of tax expenditures per NRS 360.137. For those concerned about the availability of the NAICS code to business taxpayers, use of the NAICS code will be widespread because taxpayers subject to the new Commerce Tax are required to provide the NAICS code. In addition, the NAICS code is required on applications for abatement to the Governor's Office on Economic Development and the Governor's Office on Renewable Energy. **The Department recommends assessors collect the NAICS code on Personal Property Declarations used by business taxpayers.**

2021-22 COST CONVERSION FACTORS

THREE (3) YEAR LIFE

NEVADA DEPARTMENT OF TAXATION

THREE (3) YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	67.0	33.0	0.3300
2019	2	1.03	89.0	11.0	0.1133
2018	3	1.06	95.0	5.0	0.0530
Residual		1.06	95.0	5.0	0.0530

NEVADA DEPARTMENT OF TAXATION

FIVE (5) YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	40.0	60.0	0.6000
2019	2	1.03	64.0	36.0	0.3708
2018	3	1.06	78.0	22.0	0.2332
2017	4	1.08	87.0	13.0	0.1404
2016	5	1.10	95.0	5.0	0.0550
Residual		1.10	95.0	5.0	0.0550

NEVADA DEPARTMENT OF TAXATION

SEVEN (7) YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	29.0	71.0	0.7100
2019	2	1.03	49.0	51.0	0.5253
2018	3	1.06	64.0	36.0	0.3816
2017	4	1.08	74.0	26.0	0.2808
2016	5	1.10	81.0	19.0	0.2090
2015	6	1.11	88.0	12.0	0.1332
2014	7	1.12	95.0	5.0	0.0560
Residual		1.12	95.0	5.0	0.0560

NEVADA DEPARTMENT OF TAXATION

TEN YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	20.0	80.0	0.8000
2019	2	1.03	36.0	64.0	0.6592
2018	3	1.06	49.0	51.0	0.5406
2017	4	1.08	59.0	41.0	0.4428
2016	5	1.10	67.0	33.0	0.3630
2015	6	1.11	74.0	26.0	0.2886
2014	7	1.12	79.0	21.0	0.2352
2013	8	1.13	84.0	16.0	0.1808
2012	9	1.15	90.0	10.0	0.1150
2011	10	1.18	95.0	5.0	0.0590
Residual		1.18	95.0	5.0	0.0590

NEVADA DEPARTMENT OF TAXATION

15 YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	13.0	87.0	0.8700
2019	2	1.03	25.0	75.0	0.7725
2018	3	1.06	35.0	65.0	0.6890
2017	4	1.08	44.0	56.0	0.6048
2016	5	1.10	51.0	49.0	0.5390
2015	6	1.11	58.0	42.0	0.4662
2014	7	1.12	63.0	37.0	0.4144
2013	8	1.13	68.0	32.0	0.3616
2012	9	1.15	72.0	28.0	0.3220
2011	10	1.18	76.0	24.0	0.2832
2010	11	1.20	80.0	20.0	0.2400
2009	12	1.21	84.0	16.0	0.1936
2008	13	1.24	87.0	13.0	0.1612
2007	14	1.28	91.0	9.0	0.1152
2006	15	1.32	95.0	5.0	0.0660
Residual		1.32	95.0	5.0	0.0660

NEVADA DEPARTMENT OF TAXATION

20 YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	10.0	90.0	0.9000
2019	2	1.03	19.0	81.0	0.8343
2018	3	1.06	27.0	73.0	0.7738
2017	4	1.08	34.0	66.0	0.7128
2016	5	1.10	41.0	59.0	0.6490
2015	6	1.11	47.0	53.0	0.5883
2014	7	1.12	52.0	48.0	0.5376
2013	8	1.13	57.0	43.0	0.4859
2012	9	1.15	61.0	39.0	0.4485
2011	10	1.18	65.0	35.0	0.4130
2010	11	1.20	69.0	31.0	0.3720
2009	12	1.21	72.0	28.0	0.3388
2008	13	1.24	75.0	25.0	0.3100
2007	14	1.28	78.0	22.0	0.2816
2006	15	1.32	80.0	20.0	0.2640
2005	16	1.38	83.0	17.0	0.2346
2004	17	1.42	86.0	14.0	0.1988
2003	18	1.45	89.0	11.0	0.1595
2002	19	1.46	92.0	8.0	0.1168
2001	20	1.48	95.0	5.0	0.0740
Residual		1.48	95.0	5.0	0.0740

NEVADA DEPARTMENT OF TAXATION

30 YEAR LIFE

200% DECLINING BALANCE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	7.0	93.0	0.9300
2019	2	1.03	13.0	87.0	0.8961
2018	3	1.06	19.0	81.0	0.8586
2017	4	1.08	24.0	76.0	0.8208
2016	5	1.10	29.0	71.0	0.7810
2015	6	1.11	34.0	66.0	0.7326
2014	7	1.12	38.0	62.0	0.6944
2013	8	1.13	42.0	58.0	0.6554
2012	9	1.15	46.0	54.0	0.6210
2011	10	1.18	50.0	50.0	0.5900
2010	11	1.20	53.0	47.0	0.5640
2009	12	1.21	56.0	44.0	0.5324
2008	13	1.24	59.0	41.0	0.5084
2007	14	1.28	62.0	38.0	0.4864
2006	15	1.32	64.0	36.0	0.4752
2005	16	1.38	67.0	33.0	0.4554
2004	17	1.42	69.0	31.0	0.4402
2003	18	1.45	71.0	29.0	0.4205
2002	19	1.46	73.0	27.0	0.3942
2001	20	1.48	75.0	25.0	0.3700
2000	21	1.51	77.0	23.0	0.3473
1999	22	1.53	79.0	21.0	0.3213
1998	23	1.55	81.0	19.0	0.2945
1997	24	1.57	83.0	17.0	0.2669
1996	25	1.59	85.0	15.0	0.2385
1995	26	1.63	87.0	13.0	0.2119
1994	27	1.67	89.0	11.0	0.1837
1993	28	1.71	91.0	9.0	0.1539
1992	29	1.74	93.0	7.0	0.1218
1991	30	1.85	95.0	5.0	0.0925
Residual		1.85	95.0	5.0	0.0925

MOBILE HOMES SOLD ON OR AFTER JULY 1, 1982

NEVADA DEPARTMENT OF TAXATION
MOBILE HOMES SOLD ON OR AFTER JULY 1, 1982
16 YEAR STRAIGHT LINE

YEAR FIRST SOLD	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.01	5.0	95.0	0.9595
2019	2	1.06	10.0	90.0	0.9540
2018	3	1.09	15.0	85.0	0.9265
2017	4	1.10	20.0	80.0	0.8800
2016	5	1.10	25.0	75.0	0.8250
2015	6	1.10	30.0	70.0	0.7700
2014	7	1.13	35.0	65.0	0.7345
2013	8	1.15	40.0	60.0	0.6900
2012	9	1.20	45.0	55.0	0.6600
2011	10	1.24	50.0	50.0	0.6200
2010	11	1.29	55.0	45.0	0.5805
2009	12	1.34	60.0	40.0	0.5360
2008	13	1.29	65.0	35.0	0.4515
2007	14	1.31	70.0	30.0	0.3930
2006	15	1.33	75.0	25.0	0.3325
2005	16	1.40	80.0	20.0	0.2800
2004	17	1.51	80.0	20.0	0.3020
2003	18	1.55	80.0	20.0	0.3100
2002	19	1.60	80.0	20.0	0.3200
2001	20	1.61	80.0	20.0	0.3220
2000	21	1.62	80.0	20.0	0.3240
1999	22	1.62	80.0	20.0	0.3240
1998	23	1.64	80.0	20.0	0.3280
1997	24	1.65	80.0	20.0	0.3300
1996	25	1.66	80.0	20.0	0.3320
1995	26	1.76	80.0	20.0	0.3520
1994	27	1.85	80.0	20.0	0.3700
1993	28	1.87	80.0	20.0	0.3740
1992	29	1.88	80.0	20.0	0.3760
1991	30	1.93	80.0	20.0	0.3860
1990	31	2.05	80.0	20.0	0.4100
1989	32	2.06	80.0	20.0	0.4120
1988	33	2.12	80.0	20.0	0.4240
1987	34	2.18	80.0	20.0	0.4360
1986	35	2.25	80.0	20.0	0.4500
1985	36	2.34	80.0	20.0	0.4680
1984	37	2.27	80.0	20.0	0.4540
1983	38	2.27	80.0	20.0	0.4540
Residual		1.00	80.0	20.0	0.2000[2]

[2] For Mobile Homes Sold On or Before July 1, 1982.

NEVADA DEPARTMENT OF TAXATION

BILLBOARDS

50 YEAR STRAIGHT LINE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
2021	0	1.00	0.0	100.0	1.0000
2020	1	1.00	1.5	98.5	0.9850
2019	2	1.01	3.0	97.0	0.9797
2018	3	1.04	4.5	95.5	0.9932
2017	4	1.07	6.0	94.0	1.0058
2016	5	1.09	7.5	92.5	1.0083
2015	6	1.09	9.0	91.0	0.9919
2014	7	1.11	10.5	89.5	0.9935
2013	8	1.13	12.0	88.0	0.9944
2012	9	1.15	13.5	86.5	0.9948
2011	10	1.18	15.0	85.0	1.0030
2010	11	1.21	16.5	83.5	1.0104
2009	12	1.20	18.0	82.0	0.9840
2008	13	1.23	19.5	80.5	0.9902
2007	14	1.27	21.0	79.0	1.0033
2006	15	1.32	22.5	77.5	1.0230
2005	16	1.38	24.0	76.0	1.0488
2004	17	1.45	25.5	74.5	1.0803
2003	18	1.52	27.0	73.0	1.1096
2002	19	1.54	28.5	71.5	1.1011
2001	20	1.57	30.0	70.0	1.0990
2000	21	1.59	31.5	68.5	1.0892
1999	22	1.65	33.0	67.0	1.1055
1998	23	1.67	34.5	65.5	1.0939
1997	24	1.70	36.0	64.0	1.0880
1996	25	1.72	37.5	62.5	1.0750
1995	26	1.75	39.0	61.0	1.0675
1994	27	1.80	40.5	59.5	1.0710
1993	28	1.89	42.0	58.0	1.0962

Continued on next page …

NEVADA DEPARTMENT OF TAXATION

BILLBOARDS

50 YEAR STRAIGHT LINE

YEAR ACQUIRED	AGE	COST INDEX	PERCENT DEPRECIATION	PERCENT GOOD	CONVERSION FACTOR
1992	29	1.94	43.5	56.5	1.0961
1991	30	1.99	45.0	55.0	1.0945
1990	31	2.06	46.5	53.5	1.1021
1989	32	2.13	48.0	52.0	1.1076
1988	33	2.18	49.5	50.5	1.1009
1987	34	2.23	51.0	49.0	1.0927
1986	35	2.27	52.5	47.5	1.0783
1985	36	2.33	54.0	46.0	1.0718
1984	37	2.41	55.5	44.5	1.0725
1983	38	2.51	57.0	43.0	1.0793
1982	39	2.64	58.5	41.5	1.0956
1981	40	2.88	60.0	40.0	1.1520
1980	41	3.16	61.5	38.5	1.2166
1979	42	3.47	63.0	37.0	1.2839
1978	43	3.74	64.5	35.5	1.3277
1977	44	4.08	66.0	34.0	1.3872
1976	45	4.42	67.5	32.5	1.4365
1975	46	4.79	69.0	31.0	1.4849
1974	47	5.33	70.5	29.5	1.5724
1973	48	5.79	72.0	28.0	1.6212
1972	49	6.09	73.5	26.5	1.6139
1971	50	6.38	75.0	25.0	1.5950
Residual		6.38	75.0	25.0	1.5950

SPECIAL PROPERTIES

SHORT-LIFE PROPERTY

Expected Life .... Three (3) years

Short-Life Property consists of items prone to rapid obsolescence or susceptible to breakage, loss or abnormal wear and tear. Examples include:

Linens	Uniforms
Glassware	Pots, Pans, Utensils
Barware	Motion Picture Prints
Silverware	Rental Video Tapes, DVDs, CDs

Jigs, Dies, and Molds

Patterns, jigs, dies and molds fall into this category when the type of product manufactured, industry class, use of caustic chemicals, or physical deterioration associated with production volume act to shorten their useful lives and thus require their frequent replacement. Examples include injection molds for plastic parts of high-tech devices or dies used in heavy equipment production.

Ideally, assessors should identify the industrial application and determine the actual service lives of equipment used in current production from owner declarations or surveys of average lives from individual manufacturers before classifying such property as Short-life.

Digital Cameras

Digital cameras fall into basic two categories: professional and snapshot. In recent years, consumer-grade, digital snapshot and video cameras have become a generic commodity. They offer small, flimsy LCD monitors, low image resolution, and lack advanced features like interchangeable lenses. Only snapshot cameras qualify as Short-life property.

INFORMATION SYSTEMS

Life expectancies for computers and peripherals fall into four broad categories:

PCs , tablets, and associated peripherals .... Three (3) years
Mini-computers (AS 400, VAX) .... Three (3) years
Servers .... Five (5) years
Mainframe computers (IBM 360) .... Seven (7) years

An information system consists of computers and peripheral equipment used for processing normal business transactions and the maintenance, retrieval, and analysis of business records.

A computer functions as a programmable, electronically-activated device capable of accepting information, applying prescribed processes to the information, and supplying the results of these processes with or without human intervention. It usually contains a central processing unit that provides storage, logic, arithmetic, and control capabilities. Observe that adding machines and electronic calculators do not fall into this category.

To assign appropriate expected lives to computing equipment, assessors need to recognize the differences among mainframes, servers, client computers and personal computers.

Recent advances in computing technology make differentiating mainframes, minicomputers and servers difficult, especially for laymen. When in doubt, consult manufacturer marketing divisions, service literature, or websites to determine how they classify their various product lines.

A mainframe serves as a high-performance computer used for large-scale computing environments that demand greater availability and security than smaller-scale machines can offer. Banks, government agencies, insurance companies, credit card companies, and other organizations that perform massive transaction processing typically use mainframe systems. It is also possible to obtain a server which contains many "blades," each of which is used for a single application.[2] Currently, there are blade servers that have as many as 160 blades.

Mainframes should not be confused with servers, or with a server that uses software to spin off many virtual servers, each with its own computer operating system. Servers usually cost considerably more than personal computers, have more processing power and substantial amounts of computer memory. They are therefore significantly more expensive than most personal computers and they are often kept in service longer than personal computers. Servers are often dedicated to specific tasks like

- Transaction processing (On Line Transaction or OLT servers)
- print queuing and printing (print server)
- running mission critical software, clustering, fail-over and load-balancing (application server)
- audio and video transmission (audio video server)
- exchanging short bursts of written information and opinions in an environment that offers real-time discussions (chat servers)
- sending and receiving faxes without using fax machines (fax server)
- File Transfer Protocol – moving files between computers while providing security and, organization, and transfer control (FTP server)

Historically, mainframes have been associated with centralized rather than distributed computing, although that distinction has blurred as smaller computers become more powerful and mainframes become more multi-purpose. Today, mainframes can serve both distributed users and smaller servers in computing networks. Interestingly, a mainframe actually resides within a server box.

[2] A major advantage of a blade server is that it dramatically reduces cabling requirements.

A key distinguishing feature of a mainframe is that it takes computing power away from end users and puts it in a central location. Another way to visualize a mainframe is to think of the computer as a super server, with multiple operating systems.

Here is a link to the Family Tree And Chronology of some of the older IBM Mainframes. This link will take you to the IBM page for System Z Mainframes.

By comparison, minicomputers are stand-alone computers (computer systems with attached terminals and other devices) sold to small and mid-size businesses for general business applications and to large enterprises for department-level operations. In recent years, the minicomputer has evolved into the "mid-range server" and is part of a network. IBM's AS/400e is a good example.

Peripheral equipment consists of the auxiliary machines which are designed to be placed under the control of a central processing unit. Peripheral equipment may include card readers, card punches, mass storage units, paper tape equipment, keypunches, data-entry devices, teleprinters, terminals, tape drives, disc drives, disc files, disc packs, visual image projector tubes, card sorters, plotters, collators, small inkjet printers, small laser printers, and small desktop all-in-one devices (e.g. printer/fax/scanner combination) that are sold as commodities in retail outlets and which are rapidly replaced as faster machines with new features are added.

Although one could classify computers by processor architecture, number of users supported, total system throughput, etc, ultimately the classification boils down to total system cost and the total time required to amortize the assets. Again, taxpayer records that reveal the actual service lives and disposition values of their own data processing equipment provide the best source of verifiable market data.

TAXABLE SOFTWARE (NOT ASSOCIATED WITH COMPUTER-INTEGRATED MACHINERY)

Taxable Software not associated with computer-integrated machinery .... Three (3) year life
Nevada law treats standard, prewritten software programs as tangible personal property.[3] A standard prewritten program, often called canned or off-the-shelf software, means a generic application not originally developed and produced for a specific user. This includes any programs, procedures, rules, and associated documentation pertaining to the operation of a computer system. Custom software programs consist of original, one-of-a-kind computer applications developed under contract exclusively for the particular requirements of a specific user. Custom computer programs qualify as exempt intangible personal property pursuant to NRS 361.228.

[3] **According to the IRS, "**Computer software is not a section 197 intangible even if acquired in connection with the acquisition of a business, if it meets all of the following tests.

- It is readily available for purchase by the general public.
- It is subject to a nonexclusive license.
- It has not been substantially modified.

If the software meets the tests above, it can be depreciated and may qualify for the section 179 expense deduction and the special depreciation allowance (if applicable)." http://www.irs.gov/publications/p225/ch07.html

COMPUTER-INTEGRATED MACHINERY

Expected Life: ....Seven (7) years

Computer integrated machinery, including its integrated programming or software, exhibits the following characteristics:

- The machinery and computer sell as a single unit
- The machinery cannot operate without the computer and the computer cannot perform functions outside the machinery.
- The components of the computer form an integral, structural part of the equipment itself; it is not economically or functionally feasible to replace the computer without replacing the entire machine.
- For income tax purposes, depreciation accrues to the total cost of the machine and computer as a unit.
- The capabilities of the machine cannot be expanded by substituting a more complex computer for the original.
- Embedded programming or pre-loaded software designed primarily for the function of the machine into which it is integrated runs the computer.

Examples of computer-integrated machinery include computer driven mills; computer integrated manufacturing machinery; computer integrated fabrication machinery; computerized machine lathes; and computerized assembly machinery.

COMPUTERIZED EQUIPMENT

Expected Life:

Free-standing computer system..Seven (7) years or
Generic personal computer..Three (3) years
Equipment component..NAICS industry class life

This category includes machines controlled by computers that sell as a separate unit from the machine and can perform additional functions outside the machine. The assessor should assign expected lives to the two components separately; the computer equipment has the same expected life as similar computer equipment; the machinery has the expected life assigned to its specific industry.

Examples Include:

Computerized Machine Lathes,
Computerized Assembly Machinery,
Cash Management Systems,
3-D Printers.

HIGH-TECH MEDICAL DIAGNOSTIC EQUIPMENT

Expected Life: .... Five (5) years

High-tech medical diagnostic equipment exhibits these characteristics:

- Used in medical or dental facilities;
- Subject to accelerated functional and economic obsolescence caused by rapid technological development.

Examples include:

Cardiac Ultrasonic Scanners
CAT (Comp Tomography) Scanners
Diagnostic Ultrasounds
General Ultrasonic Scanners
MRI (Magnetic) Scanners
Nuclear Medicine Cameras
OB/GYN Ultrasonic Scanners
PET Scanners (Positron Emission)
All Portable Units of Same

HIGH-TECH ELECTRONIC MEDICAL EQUIPMENT

Expected Life:

Cardiac laser units .... Three (3) years
Other items ....Seven (7) years

High-tech electronic medical equipment exhibits these characteristics:

- Used in medical or dental facilities;
- Subject to accelerated functional and economic obsolescence caused by rapid technological development.

Examples include patient monitors of all kinds:

Anesthesia Monitors, Machines and Devices
Apnea Monitors
Blood Pressure Monitors
Chart Recorders
Defibs
Dopplers
EEG Machines
EKG Machines
External Pace Makers
Heart Rate Devices
Medical Laser Units
Neurological Monitors
Oximeters
Oxygen Analyzers
Spirometers
Systolic Monitors
Temperature Monitors

OFFICE FURNITURE, RETAIL SALES EQUIPMENT, OTHER

This category includes furniture and equipment that can be found across industries.

Description	Life in Years
Air Conditioners	15
Air Conditioners, Window	7
Cash Registers (electronic)	7
Coin-wrap Equipment	15
Copy and Duplicating Machines	5
Cabinets and Shelving	15
Check-out Counters	15
Data Processing Equipment (See Also Information Systems)	7
Décor	15
Displays, Cases, and Racks	15
Mailing Machines	7
Office Furniture (Desks, Chairs, Filing Cabinets)	15
Office Kitchen Appliances (Microwave ovens, refrigerators)	15
POS – Point-of-Sale Computer Systems[4]	7
Signs[5] (Other than billboards and electronic)	15
Signs, Electronic	7
Sound Systems (background and public address)	7

MOBILE OR MANUFACTURED HOMES

This section applies only to mobile or manufactured homes classified as personal property. Pursuant to NRS 361.561, those units identified as a "travel trailer," "utility trailer" and "van conversion," in chapter 482 of NRS and any other vehicle required to be registered with the department of motor vehicles and public safety are subject to property tax unless registered and taxed pursuant to Chapter 371 of NRS. Such unregistered units and vehicles must be taxed in the manner provided in NRS 361.562 to 361.5644, inclusive.

The sticker issued pursuant to NRS 361.5643 must be affixed to a mobile or manufactured home in such a way that the sticker is clearly visible from the street. The window decal is not required for licensed mobile units or on units considered real property and may be issued at the option of the county assessor.

[4] Point-of-Sale systems include all peripherals and handheld devices used to take electronic payments or to collect related data with the exception of smartphones, tablets and POS tablets. Smartphones, tablets and POS tablets should be given a three year life.

[5] See Appendix F to determine whether signs are real or personal property. Personal property signs include vinyl and fabric banners and sign-waving mannequins.

NRS 361.325(3) segregates mobile homes into two different categories for assessment purposes based on age. Mobile homes sold on or after July 1, 1982 shall be classified according to those factors which most closely determine their useful lives. In establishing the value of other mobile homes, the commission shall begin with the retail selling price and depreciate it by 5 percent per year, but not below 20 percent of its original amount. The assessment ratio in all cases is 35 percent of the computed taxable values. See NAC 361.130 for additional information on the calculation of value for mobile homes.

Depreciation schedules and cost conversion factors apply to the 2021-22 secured and unsecured tax rolls. The 2021-22 Cost Conversion Index for Mobile or Manufactured Homes appears on page 8 of this Manual.

BILLBOARDS

NRS 361.013 defines a billboard as ". . . a sign that directs attention to a business, commodity, service, entertainment or attraction that is sold, offered or exists at a location other than the premises on which the sign is located."

NRS 361.227 requires that depreciation of a billboard must be calculated at 1.5 percent of the cost of replacement for each year after the year of acquisition of the billboard, up to a maximum of 50 years. Additional information on the calculation of billboards may be found in NAC 361.1305.

Depreciation schedules and cost conversion factors apply to the 2021-2022 secured and unsecured tax rolls. The 2021-22 Cost Conversion Index for Billboards may be found on page 9 of this manual.

LIFE EXPECTANCY GUIDELINES

2021-22 PERSONAL PROPERTY MANUAL

NAICS Industry Code	Description	Life in Years

11 AGRICULTURE AND FORESTRY

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

111 Crop Production 15

Personal property includes machinery and equipment such as tractors, combines, hay balers, forage harvesters, unlicensed farm vehicles including utility trailers, wagons and utensils used to grow crops mainly for food and fiber. The subsection comprises establishments, such as farms, orchards, groves, greenhouses, and nurseries, primarily engaged in growing crops, plants, vines, or trees (including Christmas trees) and their seeds.

Itemized Equipment

Fertilizer Distribution 10
Laser sending and receiving equipment 10
Seed cleaning machinery and equipment 20
Seed cleaning equipment – portable 10

112 Animal Production 15

Personal property includes machinery and equipment used to raise or fatten animals for the sale of animals or animal products. The subsection comprises establishments, such as ranches, farms, and feedlots primarily engaged in keeping, grazing, breeding, or feeding animals. These animals are kept for the products they produce or for eventual sale.

Itemized Equipment

1125 Animal Aquaculture, including nets and pens 7
11212 Dairy Production 15
1123 Egg Packing Equipment 20

113 Forestry and Logging 15

Personal property includes machinery and equipment used to: (1) cut timber; (2) cut and transport timber; and (3) produce wood chips in the field, including stationary saw mills, skidders, and log loaders.

Itemized Equipment

Chain saws 7
Portable saw mill 7

21 MINING

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

2111 **Oil and Gas Extraction 20**

Personal property used in oil and gas extraction are used to explore for crude petroleum and natural gas. A typical example of personal property in this category would include inventory and spare parts.

Itemized Equipment

Bolted and fiberglass tanks 15
Drilling rigs 15
Heaters, treaters, knockout dryer, separators, conditioning equipment 15
LACT units, metering devices, manifolds 15
Motors, engines, drive units 10
Secondary recovery (injection pumps, re-pressure equipment) 15
Transformers 30

2122 **Metal Ore Mining 15**

Personal property used in developing the mine site, mining or quarrying dimension stone. A typical example of personal property in this category would include inventory and spare parts.

Itemized Equipment

Oxygen generation 20
Mobile equipment, heavy use* 7

2123 **Nonmetallic mineral mining and quarrying 15**

Personal property used in developing the mine site, mining or quarrying dimension stone. A typical example of personal property in this category would include inventory and spare parts.

* Heavy use is defined as in operation for more than one shift per day, seven days a week. Mining mobile equipment eligible for this category includes haul packs, loaders, shovels, dozers, graders, backhoes, drilling trucks, and excavators.

22 UTILITIES

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

2211 **Electric Power Generation, Transmission, and Distribution 30**

Personal property used in generating, transmitting, and/or distributing electric power. A typical example of personal property in this category would include inventory and spare parts.

2212 **Natural Gas Distribution 30**

Personal property used in (1) operating gas distribution systems (e.g., mains, meters); (2) establishments known as gas marketers that buy gas from the well and sell it to a distribution system; (3) establishments known as gas brokers or agents that arrange the sale of gas over gas distribution systems operated by others; and (4) establishments primarily engaged in transmitting and distributing gas to final consumers. A typical example of personal property in this category would include inventory and spare parts.

2213 **Water, Sewage, and Other Systems 30**

Personal property used in establishments primarily engaged in operating water treatment plants and/or operating water supply systems. A typical example of personal property in this category would include inventory and spare parts.

221330 **Steam and Air-Conditioning Supply 30**

Personal property used in providing steam, heated air, or cooled air. A typical example of personal property in this category would include inventory and spare parts.

23 CONSTRUCTION

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

236 **Construction of Buildings 15**

237 **Heavy and civil engineering construction 15**

238 **Specialty Trade construction 15**

Personal property used primarily in the construction of buildings, major engineering projects such as highways and dams, and specialty trades such as pouring concrete, site preparation, plumbing, painting, and electrical work. Includes fixed load and mobile equipment such as:

Air compressors

Motor graders/leveling graders

238 **Specialty Trade construction Cont.**

Air drills
Asphalt plants
Asphalt spreaders
Backhoe/loaders
Carryalls
Cement mixers/spreaders
Crusher/crushing plant
Roadrollers/sheepsfoot rollers
Crawler cranes/ tractors
Ditchers/diggers
Earthmoving scrapers
Excavators
Fork lifts
Front end loaders / bucket loaders
Mixmobiles

Paving equipment
Portable shop
Portable storage bins
Portable storage tanks
Power hoists
Power shovels

Sand classifiers and drags
Scarifiers and rollers
Scrap metal balers
Scrubber screens and plant feeders
Welder
Wiring Equipment

Other Itemized Equipment

Cranes

Bridge	20
Jib	20
Mobile Telescopic	10
Electric generating equipment	20
Electronic controlled infrared/laser instruments	10
Power tools (saws, drills, etc.)	7
Hand tools	7
Mobile equipment, heavy use[6]	7

[6] Heavy use is defined as in operation for more than one shift per day, seven days a week

31 MANUFACTURING

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

311 Food 15

Personal property used in this industry transform livestock and agricultural products into products for intermediate or final consumption. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included. Includes equipment such as walk-in coolers, freezers and other refrigeration, grain tanks, bottling and canning equipment in the following industries:

3111	Animal food manufacturing
3112	Grain and oil seed milling
3113	Sugar and confectionery product manufacturing
3114	Fruit and vegetable preserving and specialty food manufacturing
31141	Frozen food manufacturing
31142	Fruit and vegetable canning
3115	Dairy product manufacturing
3116	Animal slaughtering and processing
3117	Seafood product preparation and packaging
3118	Bakeries and tortilla manufacturing
311811	Retail bakeries
311812	Commercial bakeries
3119	Other food manufacturing, such as honey processing

Itemized Equipment

Cereal manufacturing 20

Grain elevators, non-farm 20

Mechanical portion of packing and sorting line equipment 2nd view 30

Electronic portion of line equipment[7] 10

312 Beverage and Tobacco Product Manufacturing 15

Personal property used to manufacture beverages and tobacco products. Please note that ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

[7] If electronic component's original cost cannot be separated from other line assets, use 20 years.

312 **Beverage and Tobacco Product Manufacturing Cont.**

Manufacturing processes include:

31211	Soft drink manufacturing
31212	Breweries
31213	Wineries
31214	Distilleries

Itemized Equipment

Cold Storage and Ice-making equipment 20

313 **Textile Mills** **15**

Personal property used in the main processes in this industry which include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile.

314 **Textile Product** **15**

Personal property used in creation of textile products. With a few exceptions, processes used in this industry are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make non-apparel textile products, such as sheets and towels).

315 **Apparel Manufacturing** **15**

Personal property used in the Apparel Manufacturing industry. This industry includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients.

316 **Leather and Allied Product Manufacturing** **15**

Personal property used to transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles It includes dyeing or dressing furs.

321 **Wood Product Manufacturing**.. **15**

The production processes of the Wood Product Manufacturing sub sector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

322 **Paper Manufacturing** 15

3221 **Pulp, paper and paperboards mills** 15

Personal property used in the manufacturing of pulp and involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet.

3222 **Converted Paper Product Manufacturing** 15

Personal property used in the manufacture of paperboard containers including corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

323 **Printing and related support activities** 15

Personal property including presses, used to transfer an image from a plate, screen, film, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). When publishing and printing are done in the same establishment, the establishment is classified under Industry Code 51, Information.

Itemized Equipment

Digital or *non-impact printing equipment* 5

(Uses a computer file to directly "drive" the printing mechanism to create the image)

Blue Print Machines 15

Blue Print Machines – small table model 7

3-D Printers 7

324 **Petroleum and Coal Products Manufacturing** 20

Personal property used to transform crude petroleum and coal into usable products. The dominant process is petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation. Products such as asphalt coatings and petroleum lubricating oils are made.

325 Chemical Manufacturing... 15

3251 Basic Chemical Manufacturing 15

Personal property used in both basic chemical processes, such as thermal cracking and distillation, and in petrochemical processes, such as (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylenes made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

3254 Pharmaceutical and Medicine Manufacturing............................. 15

Personal property used in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

3255 Paint, Coating, and Adhesive Manufacturing 15

Personal property used to (1) mix pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellant coatings for concrete and masonry, and/or (2) manufacture allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

326 Plastics and Rubber Products 15

3261 Plastics Product Manufacturing 15

Personal property used in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting.

Itemized Equipment

Special tools 7

3262 Rubber Product Manufacturing.. 15

Personal property used in the industry group comprised of establishments primarily engaged in processing natural, and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

Itemized Equipment

Special tools 7

327 Nonmetallic Mineral Product 20

Personal property used to transform mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing.

3271 Clay Product and Refractory Manufacturing 15

Personal property used in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

3272 Glass and Glass Product Manufacturing 15

Personal property used in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

Itemized Equipment

Special tools 5

3273 Cement and Concrete Product Manufacturing 20

Personal property used in manufacturing Portland, natural, masonry, pozzalanic, and other hydraulic cements

Itemized Equipment

Quarry equipment{XE "quarry equipment} (Yahoo search) 15

Portable ready-mix plants 15

3274 Lime & Gypsum Product Manufacturing 20

Personal property used in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

3279 Abrasive Product Manufacturing 20

Personal property used in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

327991 Cut Stone and Stone Product Manufacturing 15

Personal property used in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

331 Primary Metal Manufacturing 20

Personal property used to smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Metal alloys and super alloys are also manufactured by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Includes:

3311 Iron and Steel Mills and Ferroalloy Manufacturing

Itemized Equipment

Special Tools 7

332 Fabricated Metal Product Manufacturing 15

Personal property is used to transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together.

Itemized Equipment

Special Tools 5

333 Machinery Manufacturing 15

Personal property used to create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine.

333314 Optical Instrument and Lens Manufacturing 15

Personal property used in: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

334 Computer and Electronic Product Manufacturing 7

Personal property used in the manufacture of computers, computer peripherals, communications equipment, and similar electronic products and components. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic industry.

3341 Computer and Peripheral Equipment Manufacturing 7

Personal property used in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals.

Personal property used in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, hubs, routers, and gateways.

3343 Audio and Video Equipment Manufacturing 10

Personal property used in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made include video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

3344 Semiconductor and Other Electronic Components 5

Personal property used in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

Includes:

clean room equipment, crystal growing equipment, deionized water systems, encapsulation equipment, photo mask and wafer manufacturing equipment, semiconductor chemical and gas systems, semiconductor electrical systems, and semiconductor test equipment.

3345 Navigation, Measuring, Medical, Control Instrument Manufacturing 7

Personal property used in manufacturing navigational, measuring, electro medical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

335 Electrical Equipment, Appliance, and Component Manufacturing 15

Personal property used to manufacture products that generate, distribute and use electrical power, such as electric lamp bulbs, lighting fixtures, small and major electrical appliances, electric motors, generators, transformers, switchgear apparatus, devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

336 Transportation Equipment Manufacturing 15

Personal property used in production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products.

The section includes:

3361 Motor Vehicle Manufacturing

3362 Motor Vehicle Body & Trailer Manufacturing

3363 Motor Vehicle Parts Manufacturing

3365 Railroad Rolling Stock Manufacturing

3364 Aerospace Product and Parts Manufacturing................................ 15

Personal property used in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

This section includes:

336412 Aircraft Engine and Engine Parts Manufacturing

337 Furniture and Related Product Manufacturing 10

Personal property used to make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan.

339 Miscellaneous Manufacturing... 15

Personal property used in the manufacture of products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

33991 Jewelry and Silverware Manufacturing 15

Personal property used in: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) re-cutting, re-polishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

42 WHOLESALE TRADE

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

423 **Wholesale Trade Fixtures and Equipment** 15

Trade fixtures (as opposed to fixtures) and equipment are used in establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. Wholesalers sell merchandise to other businesses and normally operate from a warehouse or office. See also separate listings for specific types of equipment.

44 RETAIL TRADE

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

Includes the personal property for the following:

441	**Motor Vehicle and Parts Dealers**	15
442	**Furniture and Home Furnishing Stores**	15
443	**Electronics and Appliance Stores**	15
444	**Building Material and Garden Equipment and Supply Stores**	15
445	**Food and Beverage Stores (including Convenience Stores)**	15
446	**Health and Personal Care Stores**	15
447	**Gasoline Stations**	15
448	**Clothing and Clothing Accessories Stores**	15
451	**Sporting Goods, Hobby, Book, and Music Stores**	15
452	**General Merchandise Stores**	15
453	**Miscellaneous Store Retailers, including**	15
	4531 Florists	15
454	**Non-store Retailers**	15

See also separate listings for specific types of equipment.

48 TRANSPORTATION AND WAREHOUSING

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

481 Air Transportation 20

Personal property includes most airplanes, helicopters (rotorcraft), drones weighing over 50 pounds and aircraft have a life of 20 years. There are some exceptions, which are itemized below.

Itemized Equipment

Kit built Aircraft 15
Gliders 15
Hot Air Balloons 15
Experimental Aircraft........ 15
Drones weighing 50 pounds or less........ 10

482 Rail Transportation........ 20

482112 Short Line Railroads

Itemized Equipment

Railroad Rolling Stock........ 20

483 Water Transportation........ 20

Personal property used in providing inland water transportation of passengers and/or cargo on lakes, rivers, or intracoastal waterways.

484 Truck Transportation 10

Itemized Equipment

Light Trucks 7
General freight Trucks 10
Tractor-trailers 10

485 Transit and Ground Passenger Transportation…………………….. 10

Personal property includes equipment used in Transit and Ground Passenger Transportation. This industry includes a variety of passenger transportation activities, such as urban transit systems; chartered bus, school bus, and interurban bus transportation and taxis.

Itemized Equipment

Buses 15

Automobiles, unlicensed 7

492 **Couriers and Messengers 15**

Personal property used in the provision of intercity and/or local delivery of parcels. These articles can be described as those that may be handled by one person without using special equipment. Messengers, which usually deliver within a metropolitan or single urban area, may use bicycle, foot, small truck, or van.

493 **Warehousing and Storage 15**

Personal property used in operating warehousing and storage{XE “storage:} facilities for general merchandise, refrigerated goods, and other warehouse products. These establishments provide facilities to store goods. They do not sell the goods they handle.

51 INFORMATION

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

511 **Publishing Industries 15**

Personal property used in the publishing of newspapers, magazines, other periodicals, and books, as well as directory and mailing list and software publishing.

512 **Motion Picture Production & Sound Recording 7**

Personal property used in the production and/or distribution of motion pictures, videos, television programs, or commercials; in the exhibition of motion pictures; or in the provision of postproduction and related services. Sound recording machinery and equipment is used in producing and distributing musical recordings, in publishing music, or in providing sound recording and related services.

512131 Motion Picture Theaters 15

Includes projection equipment, furniture and trade fixtures.

515 **Broadcasting and Telecommunications .... See Categories**

51511 Radio Broadcasting 10

Personal property used in broadcasting audio signals. These establishments operate radio broadcasting studios and facilities for the transmission of aural programming by radio to the public, to affiliates, or to subscribers. In recognition of the FCC change from analog to digital broadcasting equipment in radio, television, and cable industries, all analog equipment MAY be valued using a seven-year life. All other equipment will remain at the life indicated. The assessor will still be responsible for measuring obsolescence if any.

51511 Radio Broadcasting Cont.

Itemized Equipment

Radio Production Equipment 7
Service and Repair Equipment 10

51512 Television Broadcasting 10

Personal property used in broadcasting images together with sound. These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public. In recognition of the FCC mandated change from analog to digital broadcasting equipment in radio, television, and cable industries, all analog equipment MAY be valued using a three-year life. All other equipment will remain at the life indicated. The assessor will still be responsible for measuring obsolescence if any.

Itemized Equipment

Television Production Equipment.. 7
Service and Repair Equipment 10

517 Telecommunications .... See itemized equipment

Wired telecommunications personal property used in (1) operating and maintaining switching and transmission facilities to provide point-to-point communications via landlines, microwave, or a combination of landlines and satellite linkups or (2) furnishing telegraph and other non-vocal communications using their own facilities. Wireless telecommunications assets are used in operating and maintaining switching and transmission facilities that provide omni-directional communications via airwaves, such as cellular telephone or paging services. For handheld devices used to take electronic payments, see Point-of-Sale descriptions.

Itemized Equipment

Central Office Equipment, except computer-based switching equipment............................ 15
Computer-based switching equipment 5
Distribution Plant (if personal property) 30
Fiber optic cable 15
Paging Systems 5
Microwave Systems, except towers 10
Station Equipment 10

Telephone equipment, including, telex, facsimile and Two-Way Radio 5
Cellular Telephones, Smartphones, Hand-helds, Tablets and POS Tablets, and PDAs. 3

517110 Cable and Other Program Distribution ..... See itemized equipment

Personal property used in distribution systems for broadcast programming. Head end assets are defined as the electronic control center -- generally located at the antenna site of a CATV system -- usually including antennas, preamplifiers, frequency converters, demodulators, modulators and other related equipment which amplify, filter and convert incoming broadcast TV signals to cable system channels. Microwave systems include assets such as antennas, transmitting and receiving equipment, and broad band microwave assets. Program origination equipment includes assets such as cameras, film chains, video tape recorders, lighting, and remote location equipment excluding vehicles. Service and test assets include oscilloscopes, field strength meters, spectrum analyzers, and cable testing equipment. Subscriber connection and distribution systems include assets such as trunk and feeder cable, connecting hardware, amplifiers, power equipment, passive devices, directional taps, pedestals, pressure taps, drop cables, matching transformers, multiple set connector equipment, and converters. In recognition of the FCC mandated change from analog to digital broadcasting equipment in radio, television, and cable industries all analog equipment MAY be valued using a seven-year life. All other equipment will remain at the life indicated. The assessor will still be responsible for measuring obsolescence if any.

Itemized Equipment

Coaxial Cable, installed inside buildings 15
Fiber Optic Cable 15
Head end Equipment, except towers 10
Microwave Systems, except towers 10
Program Origination Equipment 10
Satellite Dish Relay; Earth station equipment... 10
Box converters having specialized computer components 3
Service and Test Equipment 10
Subscriber Connection and Distribution Systems 10

518 Internet Service Providers, Web Search Portals, and Data Processing Services

For life expectancy, please see Special Properties

Personal property assets used by Internet Service Providers, Web Search Portals, and Data Processing Services to provide: (1) access to the Internet; (2) search facilities for the Internet; and (3) data processing, hosting, and related services.

519 **Other Information Services** 15

Personal property assets used in supplying information, storing information, providing access to information, and searching and retrieving information. The main components of this group are news syndicates, libraries, and archives. It includes law and medical libraries.

53 REAL ESTATE, RENTAL, AND LEASING

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

532 **Rental and Leasing Services** 15

Personal property includes a wide array of tangible goods, such as automobiles, computers, consumer goods, and industrial machinery and equipment, to customers in return for a periodic rental or lease payment.

Itemized Equipment

Formal wear and costume rental 3
Bottled water Dispensers & Equipment 7
Furniture Rental & Leasing 7
Heavy equipment .... See Construction (Code 23)
Lawn and Garden equipment 7
Linens and Uniforms 3
Musical Instrument rentals 7
Rent-to-Own Merchandise 7
Ski Equipment Rentals 7
Video Tapes .... See Special Properties

See also separate listings for specific types of equipment.

54 PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

- See itemized equipment

Itemized Equipment

Laboratory equipment , except electronic & computerized 15
Laboratory equipment, electronic and computerized 7
Medical and law libraries (See also other information services) 15
Photography 15

54 PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES CONT

Professional and scientific equipment (See also NAICS Code 3345) 7
Professional libraries 15

Surveying equipment

GPS 7
Non-GPS 15

56 WASTE MANAGEMENT AND REMEDIATION SERVICES

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

5616 Investigation and Security Services 15

Personal property includes burglar and fire alarms and locking devices, along with equipment necessary for installation, repair, or monitoring services or (2) remote monitoring of electronic security alarm systems.

Itemized Equipment

Closed Circuit TV – Camera System 7
Firearms 20

Locksmith equipment, including:

Mechanical and electronic locking devices 20
Safes and security vaults 20

5617 Services to Buildings and Dwellings 15

Includes the fixtures and equipment for the following:

56171 Exterminating and Pest Control Services
56172 Janitorial Services
56173 Landscaping Services
56174 Carpet and Upholstery Cleaning Services

Itemized Equipment

Carpet Cleaning 15

Lawn mowing Equipment 7

562 **Waste Management and Remediation Services 10**

Personal property used in the collection, treatment, and disposal of waste materials. This includes establishments engaged in local hauling of waste materials; operating materials recovery facilities (i.e., those that sort recyclable materials from the trash stream); providing remediation services (i.e., those that provide for the cleanup of contaminated buildings, mine sites, soil, or ground water); and providing septic pumping and other miscellaneous waste management services.

Itemized Equipment

Garbage Dumpsters.. 10

Portable toilets... 10

62 HEALTH CARE AND SOCIAL ASSISTANCE

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

621 **Ambulatory Health Care Services 15**

Personal property used by health practitioners in the provision of outpatient services, with the facilities and equipment not usually being the most significant part of the production process. Includes the fixtures and equipment for the following:

6211 Offices of Physicians

6212 Offices of Dentists

6213 Offices of Other Health Practitioners, including Chiropractors, Optometrists, Mental Health Practitioners, and Physical, Occupational, and Speech Therapists

Medical and dental instruments not otherwise noted in Special Properties, include:

All Portable Units of Same

Angiographic X-ray units

Chest X-ray Units

Dental X-ray Units

Exam tables and chairs

Fluorographic X-ray Units

Lensometer

Mammographic X-ray Units

Mesoptometers

Microscopes

Portable X-ray Units

Radiographic X-ray Units

Special Procedure X-ray Units

Sterilizers

622 Hospitals 15

Personal property used to provide inpatient health services, particularly specialized facilities and equipment that form a significant and integral part of the production process. See list above for examples of equipment.

See also Special Properties for Medical Diagnostic and Medical Lab.

6244 Child Day Care Facilities 10

Personal property used in providing day care of infants or children.

71 ARTS, ENTERTAINMENT, AND RECREATION

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

711 Performing Arts, Spectator Sports, and Related 10

Includes projection equipment, furniture and trade fixtures such as movable set props, aerial and acrobatic equipment, rigging, costumes, production lighting, and special effects equipment.

Itemized Equipment

Electronic Equipment including Sound Systems 7

Seating, stages including fixed set designs, hydraulics, fountains 15

Support operations, including equipment and furniture for dressing rooms, ticket booths, snack bars, offices .... 15[8]

Water tanks .... 20[9]

711212 Car racing – race cars 3

713 Amusement, Gambling and Recreation Industries 15

Personal property used to (1) operate facilities where patrons can primarily engage in sports, recreation, amusement, or gambling activities and/or (2) provide other amusement and recreation services, such as supplying and servicing amusement devices in places of business operated by others; operating sports teams, clubs, or leagues engaged in playing games for recreational purposes; and guiding tours without using transportation equipment.

Itemized Equipment

Amusement Park (does not include structures) 15

[8] May be considered to be real property fixtures. The cost may be established from Marshall/Swift.
[9] May be considered to be real property fixtures. The cost may be established from Marshall/Swift.

Bowling Alley Pinsetters and Other Equipment 15
Bowling Electronic Scoring Machines 7

Gaming Equipment:
Electronic, slots, or computers 7

Gaming Equipment Cont.:

Player tracking systems 7
Mechanical slots 15
Other 15
Golf Carts, electric 7
Golf Course Machinery & Equipment, except lawn mowing equipment 15
Golf Course: Lawn Mowing Equipment 7
Juke Box 15
Ski Area Equipment: Snow Cats and Packers 7
Ski Rentals 7
Video and Flipper Games 7

72 ACCOMMODATION AND FOOD SERVICES

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

721 **Accommodation....... 15**

Personal property used in: (1) traveler accommodation, (2) recreational accommodation, and (3) rooming and boarding houses.

Itemized Equipment

Apartment Furnishings 15
Hotel Furnishings 15
Outdoor Patio Furnishings 7
Fire and Security Equipment 15
Health Spa Equipment: Manual 15
Health Spa Equipment: Electronic 7
Heavy use Washers 7
Linens, glassware, silverware, and uniforms (not rented) 3
Televisions 5
Telephone Systems (See also NAICS Code 517) 5

722 **Food Services and Drinking Places....... 15**

The industry groups are full-service restaurants; limited-service eating places; special food services, such as food service contractors, caterers, and mobile food services; and drinking places.

722 Food Services and Drinking Places Cont.

Itemized Equipment

Bar	15
Coffee Brewing Equipment	15
Walk-in coolers (See Also NAICS 311)	15
Linens, glassware, silverware, and uniforms (not rented)	3
Televisions, Digital	5
Televisions, Analog	5
Vending Machines	15

81 OTHER SERVICES 15

For the purposes of this manual, the following descriptions apply only to those items which can be classified as Personal Property. The designated life does not apply to Real Property or fixtures which have been converted to Real Property.

Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

811 Repair and Maintenance 15

Personal property used to restore machinery, equipment, and other products to working order. These establishments also typically provide general or routine maintenance (i.e., servicing) on such products to ensure they work efficiently and to prevent breakdown and unnecessary repairs.

Includes the fixtures and equipment for the following:

8111	Automobile Repair and Maintenance
811192	Car Washes
8112	Electronic & Precision Equipment
8113	Commercial Equipment Repair and Maintenance
8114	Personal and Household Goods Repair and Maintenance

81143 Footwear and Leather Goods Repair

Itemized Equipment

Auto Repair Diagnostic Equipment (Electronic) 7
Small Tools (See Hand Tools, NAICS 423120).......... 7
Welding Equipment.......... 15
EV Charging Stations.......... 15

812 Personal and Laundry Services.......... 15

Includes the equipment and some trade fixtures for the following (See Appendix D for determination of real or personal property):

8121 Personal Care Services
81211 Hair, nail and skin care services
81219 Other, including Diet and weight reducing – fitness
8122 Death Care Services
81221 Funeral Homes
81222 Cemeteries and Crematories
8123 Dry cleaning and Laundry Services
81231 Coin-operated Laundries and Drycleaners
81232 Dry cleaning and Laundry, except coin-operated
8129 Other Personal Services
81291 Pet Care (except Veterinary)
81292 Photo-finishing

Itemized Equipment

Coin Laundries 15
Heavy Use Washers 7
Commercial Dry Cleaning Equipment.......... 15

APPENDIX A

2021-22 PERSONAL PROPERTY MANUAL

NEVADA REVISED STATUTES AND NEVADA ADMINISTRATIVE CODE RELATED TO PERSONAL PROPERTY

(This listing may not be comprehensive. Please consult the statutes and regulations. You may find the statutes and regulations on the internet at http://leg.state.nv.us/law1.cfm).

Nevada Revised Statutes

NRS 361.013 "Billboard" defined. "Billboard" means a sign that directs attention to a business, commodity, service, entertainment or attraction that is sold, offered or exists at a location other than the premises on which the sign is located.

(Added to NRS by 1989, 1817)

NRS 361.028 "Manufactured home" defined. "Manufactured home" has the meaning ascribed to it in NRS 489.113.

(Added to NRS by 2001, 1540)

NRS 361.029 "Mobile home" defined. "Mobile home" means a vehicular structure, built on a chassis or frame, which is designed to be used with or without a permanent foundation and is capable of being drawn by a motor vehicle. It may be used as a dwelling when connected to utilities or may be used permanently or temporarily for the advertising, sales, display or promotion of merchandise or services. The term does not include a recreational park trailer as defined in NRS 482.1005.

(Added to NRS by 1989, 169; A 2001, 1727

NRS 361.030 "Personal property" defined.

1. "Personal property" means:

(a) All household and kitchen furniture.

(b) All law, medical and miscellaneous libraries.

(c) All goods, wares and merchandise.

(d) All chattels of every kind and description, except vehicles as defined in NRS 371.020.

(e) Stocks of goods on hand.

(f) Any vehicle not included in the definition of vehicle in NRS 371.020.

(g) All locomotives, cars, rolling stock and other personal property used in operating any railroad within the State.

(h) All machines and machinery, all works and improvements, all steamers, vessels and watercraft of every kind and name navigating or used upon the waters of any river or lake within this State or having a general depot or terminus within this State.

(i) The money, property and effects of every kind, except real estate, of all banks, banking institutions or firms, bankers, moneylenders and brokers.

(j) All property of whatever kind or nature, except vehicles as defined in NRS 371.020, not included in the term "real estate" as that term is defined in NRS 361.035.

2. Gold-bearing and silver-bearing ores, quartz or minerals from which gold or silver is extracted, when in the hands of the producers thereof, shall not mean, not be taken to mean, nor be listed and assessed under the term "personal property" as used in this section, but are specially excepted therefrom, and shall be listed, assessed and taxed as provided by law. [Part 3:344:1953]—(NRS A 1963, 305, 1121; 1983, 1191; 2013, 3115)

NRS 361.035 "Real estate" and "real property" defined.

1. "Real estate" or "real property" means:

(a) All houses, buildings, fences, ditches, structures, erections, railroads, toll roads and bridges, or other improvements built or erected upon any land, whether such land is private property or property of this state or of the United States, or of any municipal or other corporation, or of any county, city or town in this state.

(b) Any mobile home, factory-built housing or manufactured home which meets the requirements of NRS 361.244.

(c) The ownership of, or claim to, or possession of, or right of possession to any lands within this state.

(d) The claim by or the possession of any person, firm, corporation, association or company to any land.

2. The property described in subsection 1 must be listed under the head of "real estate."

3. Except as otherwise provided in NRS 361.2445, when an agreement has been entered into, whether in writing or not, or when there is sufficient reason to believe that an agreement has been entered into, for the dismantling, moving or carrying away or wrecking of the property described in subsection 1, the property must be classified as personal property, and not real estate.

4. For the purposes of this chapter, "real estate" or "real property" does not include leasehold or other possessory interests in land owned by the Federal Government on which land the Federal Government is paying taxes to the State of Nevada or is, pursuant to contractual obligation, paying any sum in lieu of taxes to the State of Nevada.

[Part 3:344:1953]—(NRS A 1957, 358; 1975, 1655; 1979, 824; 1993, 1183; 1999, 3465)

NRS 361.045 Taxable property. Except as otherwise provided by law, all property of every kind and nature whatever within this state shall be subject to taxation.

[Part 1:344:1953; A 1954, 29; 1955, 340]

NRS 361.227 Determination of taxable value.

1. Any person determining the taxable value of real property shall appraise:

(a) The full cash value of:

(1) Vacant land by considering the uses to which it may lawfully be put, any legal or physical restrictions upon those uses, the character of the terrain, and the uses of other land in the vicinity.

(2) Improved land consistently with the use to which the improvements are being put.

(b) Any improvements made on the land by subtracting from the cost of replacement of the improvements all applicable depreciation and obsolescence. Depreciation of an improvement made on real property must be calculated at 1.5 percent of the cost of replacement for each year of adjusted actual age of the improvement, up to a maximum of 50 years.

2. The unit of appraisal must be a single parcel unless:

(a) The location of the improvements causes two or more parcels to function as a single parcel;

(b) The parcel is one of a group of contiguous parcels which qualifies for valuation as a subdivision pursuant to the regulations of the Nevada Tax Commission; or

(c) In the professional judgment of the person determining the taxable value, the parcel is one of a group of parcels which should be valued as a collective unit.

3. The taxable value of a leasehold interest, possessory interest, beneficial interest or beneficial use for the purpose of NRS 361.157 or 361.159 must be determined in the same manner as the taxable value of the property would otherwise be determined if the lessee or user of the property was the owner of the property and it was not exempt from taxation, except that the taxable value so determined must be reduced by a percentage of the taxable value that is equal to the:

(a) Percentage of the property that is not actually leased by the lessee or used by the user during the fiscal year; and

(b) Percentage of time that the property is not actually leased by the lessee or used by the user during the fiscal year, which must be determined in accordance with NRS 361.2275.

4. The taxable value of other taxable personal property, except a mobile or manufactured home, must be determined by subtracting from the cost of replacement of the property all applicable depreciation and obsolescence. Depreciation of a billboard must be calculated at 1.5 percent of the cost of replacement for each year after the year of acquisition of the billboard, up to a maximum of 50 years.

5. The computed taxable value of any property must not exceed its full cash value. Each person determining the taxable value of property shall reduce it if necessary to comply with this requirement. A person determining whether taxable value exceeds that full cash value or whether obsolescence is a factor in valuation may consider:

(a) Comparative sales, based on prices actually paid in market transactions.

(b) A summation of the estimated full cash value of the land and contributory value of the improvements.

(c) Capitalization of the fair economic income expectancy or fair economic rent, or an analysis of the discounted cash flow.

➥ A county assessor is required to make the reduction prescribed in this subsection if the owner calls to his or her attention the facts warranting it, if the county assessor discovers those facts during physical reappraisal of the property or if the county assessor is otherwise aware of those facts.

6. The Nevada Tax Commission shall, by regulation, establish:

(a) Standards for determining the cost of replacement of improvements of various kinds.

(b) Standards for determining the cost of replacement of personal property of various kinds. The standards must include a separate index of factors for application to the acquisition cost of a billboard to determine its replacement cost.

(c) Schedules of depreciation for personal property based on its estimated life.

(d) Criteria for the valuation of two or more parcels as a subdivision.

7. In determining, for the purpose of computing taxable value, the cost of replacement of:

(a) Any personal property, the cost of all improvements of the personal property, including any additions to or renovations of the personal property, but excluding routine maintenance and repairs, must be added to the cost of acquisition of the personal property.

(b) An improvement made on land, a county assessor may use any final representations of the improvement prepared by the architect or builder of the improvement, including, without limitation, any final building plans, drawings, sketches and surveys, and any specifications included in such representations, as a basis for establishing any relevant measurements of size or quantity.

8. The county assessor shall, upon the request of the owner, furnish within 15 days to the owner a copy of the most recent appraisal of the property, including, without limitation, copies of any sales data, materials presented on appeal to the county board of equalization or State Board of Equalization and other materials used to determine or defend the taxable value of the property.

9. The provisions of this section do not apply to property which is assessed pursuant to NRS 361.320.

(Added to NRS by 1965, 1445; A 1969, 1451; 1975, 65, 1656; 1977, 1318; 1979, 79; 1981, 788, 789; 1983, 1047, 1884, 1885; 1987, 2075; 1989, 668, 1818; 1993, 2312; 1997, 1111; 1999, 1029; 2001, 842; 2003, 2758; 2009, 1216; 2013, 3116)

NRS 361.265 Written statement concerning personal property: Demand; contents; return of statement; valuation of unlisted property claimed by absent or unknown person; penalties.

1. To enable the county assessor to make assessments, he or she shall demand from each natural person or firm, and from the president, cashier, treasurer or managing agent of each corporation, association or company, including all banking institutions, associations or firms within the county, a written statement, signed under penalty of perjury, on forms and in the format prescribed by the county assessor of all the personal property within the county, owned, claimed, possessed, controlled or managed by those persons, firms, corporations, associations or companies. The signature required by this subsection may include an electronic signature as defined in NRS 719.100.

2. The statement must include:

(a) A description of the location of any taxable personal property that is owned, claimed, possessed, controlled or managed by the natural person, firm, corporation, association or company, but stored, maintained or otherwise placed at a location other than the principal residence of the natural person or principal place of business of the firm, corporation, association or company;

(b) The cost of acquisition of each item of taxable personal property including the cost of any improvements of the personal property, such as additions to or renovations of the property other than routine maintenance or repairs, and the year in which each item of taxable personal property was acquired; and

(c) If the natural person, firm, corporation, association or company owns at least 25 mobile or manufactured homes that are being leased within the county for commercial purposes, and those homes have not been converted to real property pursuant to NRS 361.244, the year, make or model, size, serial number and location of each such mobile or manufactured home.

3. The statement must be returned not later than July 31, except for a statement mailed to the taxpayer after July 15, in which case it must be returned within 15 days after demand for its return is made. Upon petition of the property owner showing good cause, the county assessor may grant one or more 30-day extensions.

4. If the owners of any taxable property not listed by another person are absent or unknown, or fail to provide the written statement as described in subsection 1, the county assessor shall make an estimate of the value of the property and assess it accordingly. If the name of the absent owner is known to the county assessor, the property must be assessed in that name. If the name of the owner is unknown to the county assessor, the property must be assessed to "unknown

owner," but no mistake made in the name of the owner or the supposed owner of personal property renders the assessment or any sale of the property for taxes invalid.

5. If any person, officer or agent neglects or refuses on demand of the county assessor or his or her deputy to give the statement required by this section, or gives a false name, or refuses to give his or her name or sign the statement, the person, officer or agent is guilty of a misdemeanor.

[Part 5:344:1953]—(NRS A 1967, 558; 1969, 1452; 1981, 327; 1983, 519, 1193; 1985, 748; 1987, 531; 1989, 1820; 2003, 2761; 2005, 2656)

NRS 361.325 Nevada Tax Commission to establish valuations of mobile homes and land; property escaping taxation to be placed on assessment roll.

1. On or before the first Monday in June of each year, the Nevada Tax Commission shall:

(a) Fix and establish the valuation for assessment purposes of all mobile homes in the State.

(b) Classify land and fix and establish the valuation thereof for assessment purposes. The classification of agricultural land must be made on the basis of crop, timber or forage production, either in tons of crops per acre, board feet or other unit, or animal unit months of forage. An animal unit month is the amount of forage which is necessary for the complete sustenance of one animal unit for 1 month. One animal unit is defined as one cow and calf, or its equivalent, and the amount of forage necessary to sustain one animal unit for 1 month is defined as 900 pounds of dry weight forage.

2. The valuation of mobile homes and land so fixed and established is for the next succeeding year and is subject to equalization by the State Board of Equalization.

3. In establishing the value of new mobile homes sold on or after July 1, 1982, the Nevada Tax Commission shall classify them according to those factors which most closely determine their useful lives. In establishing the value of other mobile homes, the Commission shall begin with the retail selling price and depreciate it by 5 percent per year, but not below 20 percent of its original amount.

4. The Nevada Tax Commission shall cause to be placed on the assessment roll of any county property found to be escaping taxation coming to its knowledge after the adjournment of the State Board of Equalization. This property must be placed upon the assessment roll prior to the delivery thereof to the ex officio tax receiver. If such property cannot be placed upon the assessment roll of the proper county within the proper time, it must be placed upon the tax roll for the next ensuing year, in addition to the assessment for the current year, if any, and taxes thereon must be collected for the prior year in the same amount as though collected upon the prior year's assessment roll.

5. The Nevada Tax Commission shall not raise or lower any valuations established by the State Board of Equalization unless, by the addition to any assessment roll of property found to be escaping taxation, it is necessary to do so.

6. Nothing in this section provides an appeal from the acts of the State Board of Equalization to the Nevada Tax Commission.

[7:177:1917; A 1929, 299; 1939, 279; 1945, 78; 1953, 576]—(NRS A 1957, 314; 1963, 1123; 1967, 825; 1975, 1105, 1660, 1762; 1981, 859; 1983, 1195)

Nevada Administrative Code

NAC 361.1127 "Fixture" defined. (NRS 360.090, 360.250) "Fixture" means an item, other than a trade fixture, that was originally personal property which has been installed or attached to land or an improvement in a permanent manner. As used in this section, "installed or attached to land or an improvement in a permanent manner" means that:

1. Either:

(a) An item is attached to, imbedded in or permanently resting upon land or an improvement, or is attached by other means that are normally used for permanent installation, and cannot be removed without substantially damaging the item or the land or improvement with which it is being used; or

(b) The use or purpose of an item that is not otherwise physically annexed to land or an improvement is so adapted that it is:

(1) A necessary, integral or working part of the land or improvement;

(2) Designed or committed for use with the land or improvement; or

(3) So essential to the land or improvement that the land or improvement cannot perform its desired function without the nonattached item; and

2. A reasonable person would consider the item to be a permanent part of the land or improvement, taking into account annexation, adaptation and other objective manifestations of permanence, including, without limitation, whether:

(a) Removal of the item would destroy the item or cause significant damage to the real property to which it is installed or attached;

(b) The historic use of the item indicates an intention to leave the item in place;

(c) The terms of a written agreement between parties indicates the intention of a tenant or lessee to remove or transfer ownership of the item; or

(d) Ownership of the item would be conveyed with a transfer of the real property to which it is installed or attached.

(Added to NAC by Tax Comm'n by R039-10, 8-13-2010, eff. 7-1-2012; A by R068-12, 9-14-2012)

NAC 361.11715 "Real property" defined. (NRS 360.090, 360.250)

1. "Real property" has the meaning ascribed to it in NRS 361.035 and includes:

(a) Land;

(b) Fixtures;

(c) Improvements;

(d) On-site enhancements; and

(e) Any rights, interests, benefits and privileges belonging or attached to the land.

2. The term does not include a trade fixture.

(Added to NAC by Tax Comm'n by R039-10, 8-13-2010, eff. 7-1-2012; A by R068-12, 9-14-2012)

NAC 361.130 Mobile or manufactured home. (NRS 360.090, 360.250, 361.227, 361.2445, 361.325)

1. The taxable value of a mobile home or manufactured home which constitutes real property is the cost of replacement of the mobile home or manufactured home less depreciation and obsolescence.

2. In determining the taxable value of a mobile home or manufactured home which constitutes personal property, each county assessor shall, if the mobile home or manufactured home was sold as new:

(a) Before July 1, 1982, value it at its retail selling price when sold to the original owner less depreciation at 5 percent per year, to a maximum depreciated value of 20 percent of its original retail selling price.

(b) On or after July 1, 1982, value it at replacement cost, when new, less depreciation. Replacement cost when new is the retail selling price to the original owner adjusted by factors reflected in the annual *Personal Property Manual*.

➥ Depreciation must be calculated pursuant to the schedule located in the annual *Personal Property Manual*. Additional depreciation and obsolescence may be calculated separately.

3. The retail selling price of a mobile home or manufactured home includes all charges for transportation, installation, accessories, profit and overhead.

4. If the owner of a mobile home or manufactured home which has been converted to real property wishes to convert the mobile home or manufactured home back to personal property, the county assessor shall provide the owner with a form for an affidavit of conversion which has been approved by the Commission and which must be recorded in the county recorder's office pursuant to NRS 361.2445 before the mobile home or manufactured home may be removed from the tax rolls. The affidavit of conversion may include information concerning the cost of acquisition of the mobile home or manufactured home. All signatures required pursuant to NRS 361.2445 to effectuate the conversion must be notarized.

5. The county assessor shall value the mobile home or manufactured home as personal property upon satisfaction of all the requirements set forth in NRS 361.2445 if the mobile home or manufactured home remains within the jurisdiction of the county assessor.

6. If a mobile home or manufactured home which has been converted to real property is completely destroyed and removed from real property, the county assessor shall remove the mobile home or manufactured home from the tax roll.

[Tax Comm'n, Property Tax Reg. part No. 2, eff. 1-14-82]—(NAC A 10-10-83; 6-29-84; 5-16-86; R031-03, 8-4-2004; R166-07, 6-17-2008)

NAC 361.1305 Billboards. (NRS 360.090, 360.250, 361.227)

1. The taxable value of a billboard is the cost of replacement of the billboard less depreciation and obsolescence.

2. The cost of replacement of a billboard must be computed by multiplying the cost of acquisition to the current owner by the appropriate factor located in the annual *Personal Property Manual*. The factor that corresponds to the year the billboard was acquired must be used. Additional depreciation and obsolescence may be calculated separately.

(Added to NAC by Tax Comm'n, eff. 8-2-90; A by R031-03, 8-4-2004)

Determination of Taxable Value of Personal Property

NAC 361.1345 Definitions. (NRS 360.090, 360.250, 361.227) As used in NAC 361.1345 to 361.139, inclusive, unless the context otherwise requires, the words and terms defined in NAC 361.1351, 361.1355 and 361.1361 have the meanings ascribed to them in those sections.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1351 "Acquisition cost" and "original cost" defined. (NRS 360.090, 360.250, 361.227) "Acquisition cost" or "original cost" means the actual cost of property to its present owner, including, without limitation, the costs of transportation and the costs of installation.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1355 "Costs of installation" defined. (NRS 360.090, 360.250, 361.227) "Costs of installation" means the costs of direct labor, direct overhead and the capitalized expense of interest or imputed charges for interest which are necessary to make the property operational.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1361 *"Personal Property Manual"* defined. (NRS 360.090, 360.250, 361.227) *"Personal Property Manual"* means a manual for the valuation of personal property that is published by the Department annually pursuant to NAC 361.1365.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1365 *Personal Property Manual*: Publication; contents; approval; use. (NRS 360.090, 360.250, 361.227)

1. The Department will annually publish a *Personal Property Manual* which describes the methods and standards that must be used for the valuation of personal property. The manual must include, without limitation, annually updated:

(a) Cost-index factors that must be used in the conversion of acquisition cost into an estimate of replacement cost new;

(b) Expected-life schedules that indicate the category of expected life for each type of property or type of industry in which the property is used; and

(c) Percent-good tables which indicate the rate of depreciation that must be applied.

2. The *Personal Property Manual* must be approved by the Commission before publication. The Department, at least 1 month before presenting the manual to the Commission for approval, must disclose all proposed modifications to the manual and hold a public workshop on the modifications.

3. Each county assessor shall use the *Personal Property Manual* in determining the taxable value of personal property.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1371 Procedure for determination of taxable value. (NRS 360.090, 360.250, 361.227)

1. The taxable value of personal property must be determined by adjusting the acquisition cost of the property by a cost-index factor and reducing the adjusted acquisition cost by an estimate of applicable depreciation. The taxable value so determined shall be deemed to be the indicator of value of replacement cost new less depreciation.

2. In determining taxable value, a county assessor shall use the schedules in the *Personal Property Manual* that show the cost-index factors, the rates of depreciation and the percent good by year. The assessor shall use the schedules by:

(a) Selecting the appropriate expected useful life of the personal property; and

(b) Selecting the appropriate cost-index factor, based on the year of acquisition of the property, and applying it to the acquisition cost of the property.

➥ The result shall be deemed to be the replacement cost new of the property.

3. The assessor shall select the method of applying depreciation to the personal property by either:

(a) Multiplying the adjusted acquisition cost of the property by the rate of depreciation and subtracting the result from the adjusted acquisition cost; or

(b) Multiplying the adjusted acquisition cost of the property by the percent-good factor.

➥ The result from either approach shall be deemed to be the taxable value of the property.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1375 Determination of expected life, cost-index factors and depreciation. (NRS 360.090, 360.250, 361.227)

1. Personal property must be categorized by the specific type of property that it is or by the type of industry in which it is used. Each category must be assigned to a schedule of expected life which is based on commonly available sources of information, including, without limitation, the life expectancy guidelines published by the Marshall and Swift Valuation Service and any other sources published in the *Personal Property Manual*.

2. The cost-index factors published in the *Personal Property Manual* must be determined by calculating the average change in costs over time. The Department shall identify the sources used to calculate the average change.

3. For purposes of calculating the amount of applicable depreciation, personal property must be assigned to one of the following expected lives:

(a) Three-year life;

(b) Five-year life;

(c) Seven-year life;

(d) Ten-year life;

(e) Fifteen-year life;

(f) Twenty-year life; or

(g) Thirty-year life.

4. Depreciation must be calculated over the expected life of the personal property by using the declining balance method, except that tables which provide a method other than the declining balance method for calculating depreciation may be used if the tables have been approved by the Commission and included in the *Personal Property Manual*.

5. For purposes of calculating the rate of depreciation, a residual amount of 5 percent must be used. Percent-good tables using a residual amount other than 5 percent may be adopted by the Commission if the Department has conducted a market study or has otherwise obtained information which indicates that a different residual amount is appropriate for the category in which the personal property is placed pursuant to subsection 1.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.138 Reported acquisition cost for leased equipment. (NRS 360.090, 360.250, 361.227) For leased equipment, the reported acquisition cost is the cost which the user of the property would incur if the equipment were purchased, less any discount customarily allowed by a seller.

(Added to NAC by Tax Comm'n, eff. 10-10-83; A by R034-03, 12-4-2003)

NAC 361.139 Personal property acquired with real property for lump sum; use of other valuation techniques. (NRS 360.090, 360.250, 361.227)

1. In determining the taxable value of personal property which was acquired with real property for a lump sum, the assessor may refer to appropriate guides which list the cost of equipment to determine the value of the personal property in relation to the value of the real property. In addition, the assessor may estimate the age of the equipment by inspecting it or discussing the approximate value of the equipment with manufacturers, dealers or other persons in the business who have knowledge of the value of the equipment. The serial number, if it exists, may enable a manufacturer to determine the date of manufacture and the original cost.

2. If sufficient data is not otherwise available to establish acquisition cost, or if the assessor determines that a reported acquisition cost is not equal to the fair market value of the property at the time of acquisition plus any costs of transportation and costs of installation, the assessor may use any nationally recognized valuation technique to determine the acquisition cost, including, without limitation:

(a) Establishing the current cost of replacement of the property with new property by reference to current manufacturing costs. If the current cost of replacement is known, the assessor shall apply depreciation to that cost to determine the taxable value.

(b) Using a guide which lists the cost or a procedure recognized by businesses which use such equipment to determine the taxable value. Before such a guide or procedure may be used, an assessor must receive approval from the Executive Director.

(c) Using information based on current market data.

3. Upon request, the Division of Local Government Services of the Department will provide information on various guides which may be used to determine original cost.

(Added to NAC by Tax Comm'n, eff. 10-10-83; A 6-29-84; R034-03, 12-4-2003; R068-12, 9-14-2012)

NAC 361.11745 "Trade fixture" defined. (NRS 360.090, 360.250) "Trade fixture" means an item of personal property that:

1. Is installed or attached nonpermanently to real property by an owner or tenant for the purpose of conducting a business or trade and not for the enhancement of the real property to which it is installed or attached; and

2. Has a unique identity and function which is related to the business or trade for which it is installed or attached and which is distinct from the real property to which it is installed or attached.

(Added to NAC by Tax Comm'n by R068-12, eff. 9-14-2012)

Excerpts from Department of Taxation Letter of Guidance

Letter dated December 02, 2004, responding to county assessors' question:

"In determining the proper amount of depreciation to be applied to personal property using the Department's Personal Property Manual, does the year of acquisition refer to a calendar year or a fiscal year?"

Short Answer

The use of the year of acquisition is dependent on the fiscal year only with regard to the correct selection of the Personal Property Manual to be used. The year of acquisition is otherwise an actual date during a calendar year that indicates the age of the property to be used in the expected life tables.

(Please ask the department for a copy of the letter if you wish to read the entire discussion.)

APPENDIX B

Methodology Used to Estimate Cost Indexes

The percent change in each index is measured between the current year and the prior year. The mean of the sum of the changes for each year of the expected life table is calculated and becomes the basis for the cost index to trend acquisition cost to a current replacement cost.

Sources Used to Estimate Cost Indexes

Producer Price Index (PPI)

The Producer Price Index (PPI) is a family of indexes that measures the average change over time in selling prices received by domestic producers of goods and services. PPIs measure price change from the perspective of the seller. This contrasts with other measures, such as the Consumer Price Index (CPI), that measure price change from the purchaser's perspective. Sellers' and purchasers' prices may differ due to government subsidies, sales and excise taxes, and distribution costs.

Data Source

- The PPI sample includes approximately 25,000 establishments providing close to 100,000 price quotations per month.
- Participating establishments report price data primarily through the mail.
- Good and services included in the PPI are weighted by value-of-shipments data contained in the 1992 economic census.
- Industries and products are systematically resampled as needed.

The producer price index series reference has been updated from a Stage of Processing ID code to a Final Demand-Intermediate Demand Goods Index. The conversion may be found in an Index Concordance Table located at http://www.bls.gov/ppi/fdidconcordance.htm, which converts SOP3200, Capital equipment, to FD41312, Private capital equipment. The PPI Index using FD41312 may be found at http://www.bls.gov/ppi/fdidsf16.htm.

Consumer Price Indexes (CPI)

The consumer price index (CPI) is a measure of the average change in prices over time of goods and services purchased by households. The Bureau of Labor Statistics publishes CPIs for two population groups: (1) the CPI for Urban Wage Earners and Clerical Workers (CPI-W), which covers households of wage earners and clerical workers that comprise approximately 32 percent of the total population and (2) the CPI for All Urban Consumers (CPI-U) and the Chained CPI for All Urban Consumers (C-CPI-U), which cover approximately 87 percent of the total population and include in addition to wage earners and clerical worker households, groups such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, and retirees and others not in the labor force.

The CPI represents all goods and services purchased for consumption by the reference population (CPI-U or CPI-W). BLS has classified all expenditure items into more than 200 categories, arranged into eight major groups. Major groups and examples of categories in each are as follows:

- FOOD and BEVERAGES (breakfast cereal, milk, coffee, chicken, wine, full service meals and snacks)
- HOUSING (rent of primary residence, owners' equivalent rent, fuel oil, bedroom furniture)
- APPAREL (men's shirts and sweaters, women's dresses, jewelry)
- TRANSPORTATION (new vehicles, airlines fares, gasoline, motor vehicle insurance)
- MEDICAL CARE (prescription drugs and medical supplies, physicians' services, eyeglasses and eye care, hospital services)
- RECREATION (televisions, cable television, pets and pet products, sports equipment, admissions)
- EDUCATION AND COMMUNICATION (college tuition, postage, telephone services, computer software and accessories)
- OTHER GOODS AND SERVICES (tobacco and smoking products, haircuts and other personal services, funeral expenses)

Also included within these major groups are various government-charged user fees, such as water and sewerage charges, auto registration fees, and vehicle tolls. The CPI also includes taxes (such as sales and excise taxes) that are directly associated with the prices of specific goods and services. However, the CPI excludes taxes (such as income and Social Security taxes) not directly associated with the purchase of consumer goods and services.

The CPI does not include investment items, such as stocks, bonds, real estate, and life insurance. (These items relate to savings and not to day-to-day consumption expenses.)

The Consumer Price Index series ID reference is CUUR0400SA0, CUUS0400SA0 for area West Urban, All Items. The base period is 1982-84 = 100. The data may be found at http://data.bls.gov/pdq/SurveyOutputServlet?data_tool=dropmap&series_id=CUUR0400SA0,CUUS0400SA0.

Marshall Valuation Service

Marshall Valuation Service publishes a national average equipment cost index based on industry type. The Department measures the change in the index for each category of industry from the prior year.

Market Tests

In addition to the sources already cited, the Department conducts market tests to validate the results of applying the cost indices to particular items of personal property. The original cost of a selected sample of personal property items is trended using the proposed cost index conversion factor. The result of this calculation is compared to the actual average resale of the item obtained from various market research sources. The purpose of the market test is to ensure the proposed cost indices do not result in a value which exceeds full cash value. The market tests are also used to establish hypothetical market-based depreciation schedules. The sources of information for the market comparisons include the following:

- **N.A.D.A., The Manufactured Housing Guide Cost Online** (Online Version) The Guide provides the average retail book value by manufacturer, model, and region of mobile home, with tables for options. Values are provided for homes one to fourteen years of age, and conversion tables for homes older than 14 years.
- **Clymer, Powersport Vehicle Blue Book**, (Online Version)(Penton Business Media, Inc., Overland Park, KS). The Blue Book provides pricing in the powersports industry, including snowmobiles, personal watercraft, trailers, and motorcycles.
- **Aircraft Bluebook Price Digest Online**, (Online Version)(Penton Business Media, Inc., Overland Park, KS). The Bluebook provides representative average retail prices of fixed wing aircraft and helicopters.
- **Orion Research Corporation**, (Roger Rohrs Publisher) http://www.usedprice.com. The web site /is the electronic successor to the Orion Blue Book. It determines the used prices of computers and peripherals based on dealer surveys gathered nationwide. Dealers are asked to provide the “asking price,” “Selling price,” and “days to sell.” The used price is then calculated based on what an average store could sell the product for in 30 days or less. Orion Research states that this data is updated on an ongoing basis..
- **Grounds Maintenance Equipment Blue Book Online**, (Online Version)(Penton Media, Overland Park, KS: 66212). The Blue Book provides the estimated average resale or retail price, excluding options of power equipment.
- **The Official Tractor Blue Book Online**,(Online Version)(Penton Media, Overland Park, KS: 66212). The Blue Book provides the estimated average resale or retail price, excluding options of power equipment.
- **Green Guide for Construction Equipment**, (Online version) (Equipment Watch, 6151 Powers Ferry Road, Suite 200, Atlanta , GA 30339) The values in this guide are derived from a reporting system of equipment dealers, distributors, manufacturers, auctioneers and contractors. It is based on both surveys and averaging of actual sales. These volumes include Volume 1: Earthmoving Equipment, Volume 2: Lifting Equipment and Volume 3: Other Equipment (Compaction, Concrete and Crushers).
- **Estimated Useful Lives of Depreciable Hospital Assets,** (Revised 2013 Edition AHA Chicago Press, Health Forum, Inc. 155 North Wacker Drive, Suite 400, Chicago IL 60606)

APPENDIX C

Methodology Used to Estimate Expected Useful Life

The Department estimates the expected useful life of different types of personal property by surveying a variety of sources. Expected useful life is defined as the amount of time an item of personal property can be expected to last before it wears out, decays, gets used up, becomes obsolete, or loses its value from natural causes. The life is measured from the time the property is first put into service until it is retired from service or permanently withdrawn from use in a trade or business, or when the production of income ceases because the property has been sold, exchanged, converted to personal use, abandoned, or otherwise destroyed.

The Department does not have the resources available to perform its own mortality or actuarial studies. However, there are other sources that do perform this service. The sources itemized below include actuarial studies of the Internal Revenue Service, Marshall and Swift Costing Service, and the California State Board of Equalization. Also included are the surveys of several western states and certain industries.

Sources Used to Estimate Expected Useful Life

Marshall Swift Valuation Service, "Residential Cost Handbook", (Marshall & Swift, L.P., December 2019) Costs ranges are based on averages created for the US and Canada, and other items listed are based on what is readily available today.

Marshall Swift Valuation Service, "Life Expectancy Guidelines," (Marshall & Swift, L.P., January 2020)

Depreciable assets are listed by industry group and are extracted from U.S. Treasury Department Internal Revenue Service Publication 534 titled "Depreciation." The Guidelines list ranges of life. In certain cases, the IRS was not the primary source. In those cases, the range of life is based on a composite of studies of equipment, bookkeeping practices and appraisers' opinions as compiled from a consensus of recognized trade groups, suppliers and other interested parties. Computers and terminals are one example of an independent study conducted by Marshall & Swift.

Department of the Treasury, Internal Revenue Service, Publication 946, "How to Depreciate Property," and Publication 534, "Depreciating Property Placed in Service Before 1987."

These two publications specifically identify types of property and the expected useful life. For instance, an example of five-year property is computers and peripheral equipment.

California:

California Assessors Equipment Index and Percent Good Factors 2019

Arizona:

Arizona Department of Revenue Personal Property Manual 2019

Montana:

State of Montana Personal Property and Livestock Reporting for Tax Year 2019

Oregon:

Oregon Department of Revenue, Personal Property Valuation Guidelines 2019

Utah:

Utah State Tax Commission Recommended Personal Property Valuation Schedules and Registered Vehicle Uniform Fees 2019

Wyoming:

Wyoming Personal Property Manual 2020

APPENDIX D

2021-22 PERSONAL PROPERTY MANUAL: VALUATION GUIDELINES

Exemptions from Property Taxes

Article 10, Section 1 of the Nevada Constitution requires the "valuation for taxation of **all** property, real, personal and possessory...." NRS 361.045 also provides that, except as otherwise provided by law, all property of every kind and nature whatever within this state shall be subject to taxation. Other statutes, however, grant exemptions to particular types of property. Some are granted exemption at face-value, and other types of property must qualify according to specific criteria in order to receive the exemption.

The types of exemptions range from partial exemptions granted to veterans, disabled veterans, surviving spouses and blind persons to exemptions from taxation for all real and personal property granted to governmental entities, religious, charitable and non-profit organizations, and individual organizations which are specifically cited. In many cases, the statutes specifically recite that the property must be used to carry out the legitimate function of the organization, and if not, the property becomes taxable.

For the types of exemptions which must go through a qualification process, the county assessors must collect, evaluate and process the various claims for property tax exemptions. Application forms which have been approved by the Nevada Tax Commission should be made available. Each form should request information regarding taxpayer contact information, the type of exemption being claimed, the property which the exemption, if granted, would affect, a statement or statements why the property qualifies for the exemption, and supporting documentation if necessary. The purpose of any form is to provide sufficient information to help assessors make a reasoned determination to approve or deny applications.

In the event a claim for exemption is ambiguous or open to interpretation, how the property is used may indicate whether or not an exemption applies. The general rule espoused by the courts is that strict construction of exemption statutes applies to exemptions for property held in private ownership but not to exemptions for public property where exemption is the rule and taxation the exception. 2 Thomas M. Cooley, *The Law of Taxation*, § 673 at 1414-15 (4th ed. 1924). Said another way, property held in private ownership must strictly comply with all the criteria established for the exemption because “taxation is the rule and exemption the exception.” On the other hand, for property held by a public entity, the rule is reversed to say “exemption is the rule and taxation the exception.”

The purpose in establishing a broad construction of exemption for public entities is to prevent an escalating spiral of unnecessary taxation and administrative costs with no benefit to the public. 16 Eugene McQuillin, *The Law of Municipal Corporations*, § 44.57 at 206 (3rd ed. 1994). If one governmental entity chooses to tax the property of another governmental entity, the governmental entity forced to pay taxes may have to levy and collect new taxes to meet the demands of the tax. 2 Cooley, *supra*, § 621 at 1313. The effect of such a tax spiral is that the public would be taxing itself to raise money to pay itself.

In cases where it is not clear whether an exemption should be granted, assessors should solicit legal advice from the county district attorney's (D.A.) office.

The attached chart lists the current status of specific exemptions available in the statutes, in alphabetical order.

Legend:
Due Date for Application:
(1) No application required
(2) One time only until status changes. The claim must be made by June 15th. *See NRS 361.155 (1) and (3)*
(3) Annually, by June 15th. *See NRS 361.155 (1)*
(4) Annually, by July 1st. *See NAC 361.062*
(5) Annually, by December 30th. *See NRS 362.050*

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
Airport	361.061(1)		Real	(2)	Improvement of land by the public as an airport is a municipal purpose, whether or not the airport is owned or operated by a local government.
American Land Conservancy	361.111		Real	(2)	Real property including improvements is exempt if: the property is held for acquisition by a Federal, state or local government and the said government has agreed in writing to consider acquiring said real property; or if the property will be held indefinitely and vested in the listed conservancy organization. If the property is held for purposes of conservation for any entity other than the State or local government, the land must be assessed as first class pasture. If the property is transferred for purposes other than conservation, taxes must be collected for each year it was exempt.

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
American National Red Cross and Nevada Chapters	361.110		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also YMCA, YWCA, American National Red Cross, Salvation Army Corp, GSA, Camp Fire Girls, BSA, Sierra Arts Foundation, Nevada Museum of Art, Inc.*
Apprenticeship Programs	361.106		Both	(2)	Real and personal property of an apprenticeship program is exempt if (1) the property is held in a trust created by 29 U.S.C. § 186 or (2) is owned by a local or state apprenticeship committee and the program is operated by a qualifying organization and registered and approved by the state apprenticeship council.
Archaeological Conservancy	361.111 AB 209 (2007)		Real	(2)	See explanation under American Land Conservancy.
Architectural barrier Removal for Disabled Persons	361.087		Real	(2)	Improvements to a residence occupied by a person with a disability are exempt. The person must claim the benefit by filing an affidavit setting forth the nature of the improvement and the date of making the improvement. See statute for examples.
Bank Deposits	Article 10		Personal	(1)	Articles of personal property deemed to represent an interest in real or personal property already assessed and taxed is exempt.
Bee colonies	361.068		Personal	(1)	Bee colonies are exempt personal property.
Blind Persons	361.085		Both	(3)	Property of blind persons up to an assessed value of $3,000, as modified by CPI, is exempt. The original affidavit of claim must be accompanied by a certificate from a physician certifying the person

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
					is blind. Renewal affidavits must be completed each year.
Boats	361.068		Personal	(1)	All boats are exempt.
Bonds	Article 10		Personal	(1)	Articles of personal property deemed to represent an interest in real or personal property already assessed and taxed is exempt.
Book Accounts	Article 10		Personal	(1)	Articles of personal property deemed to represent an interest in real or personal property already assessed and taxed is exempt.
Boulder City Museum and Historical Association	361.110		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also YMCA, YWCA, American National Red Cross, Salvation Army Corp, GSA, Camp Fire Girls, BSA, Sierra Arts Foundation.*
Boy Scouts of America	361.11		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*
Business Inventories & Consumables	361.068	361.065	Personal	(1)	Property consumed during the operation of the business, as differentiated from a component part of a manufactured item, is exempt. The property must meet the criteria listed in NAC 361.065.
Camp Fire Girls Inc.	361.11		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*
Campers, slide-in & shells	361.068		Personal	(1)	All slide-in campers and camper shells are

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
					exempt.
Carnival, circus, convention, display, exhibition, fair	361.068		Personal	(1)	Personal property, transient in nature, owned by a non-resident and located in this state for use by or in a carnival, circus, convention, display, exhibition or fair is exempt. *See also transient personal property.*
Cost of collection	361.068		Personal	(1)	Personal property for which the annual taxes would be less than the cost of collecting those taxes is exempt. NTC determines level of cost.
Cemeteries and Graveyards - Public	361.130		Real	(1)	Exempt cemeteries and graveyards must be open to the public and no charge is made for burial.
Cemeteries and Graveyards – Private	361.132		Real	(2)	Real property of a nonprofit corporation governed by the provisions of NRS Chapter 82 formed for the purposes of procuring and holding lands to be used exclusively for a cemetery are exempt, so long as the lots or plats remain dedicated to the purpose of a cemetery.
Charitable Foundation: *See University*	361.098		Both	(2)	All property owned by the charitable foundation established by the Board of Regents of University of Nevada is exempt unless it is used for a purpose other than carrying out the legitimate functions of the foundation.
Charitable Organizations	361.135		Both	(2)	See Lodges
Charitable Corporations	361.140		Both	(2)	Property actually occupied and used by corporation meeting certain qualifying criteria is exempt.

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
Charter School Leased Property	361.096		Both	(2)	All property leased or rented to a charter school is deemed to be used for an educational purpose and is exempt. Only the portion of the property that is used for the lease or rental to a charter school is exempt.
Churches & Chapels	361.125		Both	(2)	Buildings and personal property used for religious worship other than marriage chapels, is exempt. The property must be owned by a recognized religious society or corporation. If the property is used for other than church purposes and a rent is received, the property is not exempt.
Church Land *See also "Land Used for Worship"*	361.125		Real	(2)	Parcels of land used exclusively for worship, including without limitation, both developed and undeveloped portions of a parcel.
Counties, Town, Municipal Corp	361.060		Both	(1)	Property of counties, domestic municipal corporations, irrigation drainage, reclamation district, or town, except for certain community pastures, is exempt. *See also Nevada Rural Housing Authority, Irrigation Districts*
Conservation District	361.060		Real	(1)	Real property acquired on or after 7-1-2003 by a conservation district is exempt.
Defenders of Wildlife	361.135		Both	(2)	*See Lodges for explanation.*
Disabled Veterans	361.091		Both	(3)	Up to $20,000 assessed value of property, adjusted by CPI, may be exempt, based on a sliding scale of disability of the veteran-owner. Only the property of residents or their surviving spouses meeting certain qualifying criteria is eligible for exemption.

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
Drainage Ditches, Canals & Irrigation Systems	361.070		Real	(1)	Drainage ditches and canals along with the lands included in the right-of-way of the ditch or canal are exempt. Each part of a permanently installed irrigation system, including pipes, concrete linings of ditches and headgates, are exempt.
Elderly & Handicapped Housing	361.086		Real and personal used for housing	(2)	All real property and mobile or modular housing and related facilities for elderly or handicapped persons are exempt if certain qualifying criteria are met.
Eagles Club	361.135		Both	(2)	*See Lodges for explanation*
Elks Club	361.135		Both	(2)	See Lodges for explanation.
Energy Systems (fka Heating & Cooling Systems)	701A.200 (fka 361.079)	361.052-361.058	Both	(1)	The value of a qualified system is not included in the assessed value of the building of which it is a part. Qualified systems in commercial or industrial buildings receiving certain other abatements or exemptions are ineligible for this exemption. System must conform to standards established by the Department.
Fine Art for public display	361.068; 361.186	361.030 – 361.044	Personal	(3)	The exemption is limited to certain kinds of works of art purchased for $25,000 or more and meets certain public display requirements. When a taxpayer collects an admission fee, the amount of exemption is reduced by the net revenue received by taxpayer. *See NRS and NAC requirements.*
Girl Scouts of America	361.11		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*
Habitat for Humanity	361.115		Both	(2)	All property is exempt unless it is used for a purpose other than carrying out the legitimate

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
					functions of the organization. *See also Nevada Children's Foundation, Nevada Heritage Association.*
Hospital	361.083		Real	(2)	Property on which stands a hospital or other charitable asylum for the care or relief of orphans or sick, infirm or indigent persons owned by a qualifying non-profit corporation, is exempt. If the property is used for a different purpose, the property is taxable. *See also orphan children.*
Household goods and furniture	361.069	361.085	Personal	(1)	Household goods, furniture except certain appliances and furniture of time-share projects, are exempt. Examples are in both statute and regulation.
Irrigation, Drainage, Reclamation District	361.060		Both	(1)	See Counties, Towns for explanation.
Knights of Pythias	361.135		Both	(2)	*See Lodges for explanation.*
Knights of Columbus	361.135		Both	(2)	*See Lodges for explanation.*
Lahontan Audubon Society	361.135		Both	(2)	*See Lodges for explanation.*
Land used for Worship	361.125		Real	(2)	*See Church Land for explanation.*
Livestock	361.068		Personal	(1)	Livestock is exempt. Livestock is defined at NAC 361A.055. See also Article 10 (6).
Lodges & other charitable organizations	361.135		Both	(2)	Funds, furniture, paraphernalia and regalia owned by certain charitable organizations as well as real estate and fixtures are exempt. If the real estate is leased, the exemption does not apply to the portion so leased or rented.
Low income housing projects	361.082	361.089	Both	(3)	That portion of real property and tangible personal property used for housing and related facilities for persons with low incomes is exempt if the property

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
					meets certain criteria.
Masons	361.135		Both	(2)	*See Lodges for explanation.*
Mortgages	Article 10		Personal	(1)	Articles of personal property deemed to represent an interest in real or personal property already assessed and taxed is exempt.
Motor Vehicles	361.067		Personal	(1)	Vehicles defined in NRS 371.020 are exempt, except mobile homes. NRS 371.020 refers to NRS 482 and 706. Under NRS 482.210, special mobile equipment is not licensed and is therefore taxable for property tax.
Nathan Adelson Hospice	361.088		Both	(2)	All property is exempt, unless it is used for any purpose other than carrying out the legitimate functions of hospice care.
National Audubon Society	361.135		Both	(2)	*See Lodges for explanation.*
Nature Conservancy	361.111		Real	(2)	*See explanation under American Land Conservancy.*
Nevada Children's Foundation	361.115		Both	(2)	*See Habitat for Humanity for explanation.*
Nevada Heritage Association	361.115		Both	(2)	*See Habitat for Humanity for explanation.*
Nevada Land Conservancy	361.111		Real	(2)	*See explanation under American Land Conservancy.*
Nevada Museum of Art	361.11		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also YMCA, YWCA, American National Red Cross, Salvation Army Corp, GSA, Camp Fire Girls, BSA, Sierra Arts Foundation.*
Nevada Rural Housing	361.060		Real	(1)	*See explanation under Counties, Cities*

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
Authority					
Noncommercial theaters	361.145		Both	(2)	Buildings, furniture & equipment of noncommercial theaters owned and operated by nonprofit educational corporations organized for the exclusive purpose of conducting theater practice classes and the production of plays on a nonprofessional basis are exempt.
Nonprofit private schools	361.105		Both	(2)	All property is exempt from taxation.
Odd Fellows	361.135		Both	(2)	*See Lodges for explanation.*
Orphan children or sick, infirm or indigent persons	361.083		Real	(2)	Land and buildings use for the care or relief of orphans or of sick, infirm or indigent persons owned by a nonprofit corporation organized or existing pursuant to NRS 82, is exempt. *See also Hospitals.*
Patented Mining Claims	362.010-362.095		Real	(5)	Upon receipt of an affidavit from the county recorder pursuant to NRS 362.050, the assessor shall exclude from the roll the assessment against the patented mine or mining claim named in the affidavit.
Pershing County Kids, Horses, Rodeo Inc.	361.107		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization.
Personal Property held for sale by merchant	361.068		Personal	(1)	Personal property held for sale by a merchant is exempt.
Personal Property held for sale by manufacturer	361.068		Personal	(1)	Personal property held for sale by a manufacturer is exempt.
Personal property in transit	361.160-361.185	361.062	Personal	(4)	Claims must be submitted to county assessor in which the warehouse is located and a certification from the warehouse as to the status of the

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
					property must be attached.
Pipe & Irrigation Equipment	361.068		Personal	(1)	Pipe and other agricultural equipment used to convey water for the irrigation of legal crops is exempt.
Pollution control devices	361.077	361.046-361.050	Both	(3)	Property used as a facility, device, or method for the control of air or water pollution is exempt. Taxpayer must supply an annual affidavit to assessor on a form approved by Department. Certain property is not exempt per NAC 361.046.
Possessory Interest –Vending stands	361.159		Personal	(3)	The possessory interest in otherwise exempt property is taxable, except for vending stands operated by blind persons under the auspices of the Bureau of Services to the Blind – DETR.
Possessory Interest – Public Airport	361.159		Personal	(2)	The possessory interest in otherwise exempt property is taxable, except for personal property owned and used in a public airport.
Possessory Interest – Public airport, park, market, fairground	361.157(2)(a)		Real	(2)	The possessory interest in otherwise exempt property is taxable, except for real property located upon a public airport, park, market, or fairground. Certain leased property on a pubic airport made available for purposes other than the purposes of a public airport is taxable.
Possessory Interest – Federal Property	361.157(2)(b)		Real	(1)	A possessory interest in federal property for which PILT payments are made is exempt.
Possessory interest – state-supported educational institution	361.157(2) c		Real	(1)	A possessory interest in the property of any state-supported educational institution is exempt, except any part located within a TIA created pursuant to NRS 278C.155.
Possessory interest – Taylor	361.157(2)		Real	(1)	A possessory interest in property used by

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
Grazing Act, USFS, BuRec	(d)				persons, associations or corporations according to the Taylor Grazing Act, United States Forest Service or the Bureau of Reclamation is exempt.
Possessory interest – Indian tribe	361.157(2)(e)		Real	(1)	A possessory interest in property of any Indian held in trust by the U.S. is exempt.
Possessory interest – Vending stands of the blind	361.157(2)(f)		Real	(1)	A possessory interest in vending stand locations operated by blind persons under the auspices of the Bureau of Services to the Blind and Visually Impaired – DETR, is exempt.
Possessory interest – geothermal leases	361.157(2)(g)		Real	(1)	A possessory interest in geothermal leases for resources which have not been put into commercial production, is exempt.
Possessory interest – public officer or employee	361.157(2)(h)		Real	(1)	A possessory interest in property that is leased, loaned or made available to a public officer or employee in the course of public employment, is exempt.
Possessory interest – parsonage	361.157(2)(i)		Real	(1)	A possessory interest in a parsonage owned by a recognized religious society or corporation when used exclusively as a parsonage, is exempt.
Possessory interest – Charitable or religious residence	361.157(2)(j)		Real	(1)	A possessory interest in a residence used by a person carrying out the activities of a charitable or religious organization is exempt
Possessory interest – shelter for elderly or indigent	361.157(2)(k)		Real	(1)	A possessory interest in property which is used to provide shelter at a reduced rate to the elderly or indigent is exempt.
Possessory interest – rental of meeting rooms	361.157(2)(l)		Real	(1)	A possessory interest in property used as meeting rooms or similar facilities for periods of less than 30 consecutive days is exempt.
Possessory interest – daycare	361.157(2)		Real	(1)	A possessory interest in property used as a

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
	(m)				daycare by a nonprofit organization is exempt.
Promissory Notes	Article 10		Personal	(1)	Articles of personal property deemed to represent an interest in real or personal property already assessed and taxed is exempt.
Privately owned airports used by public	361.061(2)		Real	(2)	Privately owned airport property used for a public purpose, except areas from which income is derived, is exempt.
Privately owned parks used by public	361.0605	361.080	Real	(2)	The initial claim for exemption must be accompanied by a copy of the agreement with a local government that the property may be used by the public without charge. A sign must also be posted at each entrance to park. The exemption does not include areas from which income is derived.
Public Function Trusts	361.062		Both	(2)	Property of a trust created for the benefit of any public function pursuant to law is exempt, however, PILT monies may be paid to the beneficiary if so provided in any agreement contained in creating the trust.
Radioactive fallout shelters	361.078		Real	(3)	Residential property is exempt up to $1,000 in assessed value if it meets certain qualifying conditions.
Raw materials & components consumed in the process of manufacture	361.068		Personal	(1)	Raw materials are exempt when they are held by a manufacturer for manufacture into products. Supplies consumed in the process of manufacture are also exempt.
Salvation Army Corps	361.11		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
School districts	361.065		Both	(1) school dist	All property owned by any legally created school district or charter school and devoted to public school purposes is exempt.
				(2) charter school	
Sierra Arts Foundation	361.11		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*
State lands	361.055		Both	(1)	All property owned by the state, except land assigned to the Department of Wildlife, is exempt. PILT payments are made by the Department of Wildlife.
Stocks	Article 10		Personal	(1)	Articles of personal property deemed to represent an interest in real or personal property already assessed and taxed is exempt.
Surviving Spouse	361.080		Both	(3)	Property of surviving spouses up to an assessed value of $1,000, as modified by CPI, is exempt. The original affidavit of claim must be accompanied by a death certificate showing the claimant was married to the deceased at the time of their death. Renewal affidavits must be completed each year.
Surviving Spouses of Disabled Veterans	361.091		Both	(3)	See Disabled Veterans.
Transient Personal Property	361.068		Personal	(1)	Personal property owned by a non-resident and located in Nevada for purposes of a display, exhibition, convention, carnival, fair or circus is exempt. *See also Carnival, fair circus.*

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
United States	361.050		Both	(1)	All property owned by the United States is exempt.
University Fraternities & Sororities	361.100		Real	(2)	Real property owned by fraternities and sororities whose members are students at UNR or UNLV and use the property as their home, is exempt.
University System: Charitable Foundation	361.098		Both	(2)	All property owned by a charitable foundation established by the Board of Regents of the University of Nevada is exempt, unless it is used for a purpose other than the legitimate functions of the foundation.
University System Leased Property	361.099	361.070	Both	(2)	Property leased to the Nevada System of Higher Education is exempt if the total consideration from the lease is less than 10 percent of the fair market value of the property. Certain documentation must be provided. *See NAC 361.070.*
Unpatented Mines & mining Claims	361.075		Real	(1)	Unpatented mines and mining claims are exempt, except for possessory interests in lands held by U.S. or state of Nevada.
Vehicles	361.067		Personal	(1)	*See Motor Vehicles*
Veterans	361.09		Both	(3)	Up to $2,000 assessed value, adjusted by CPI, of property may be exempt. Only the property of residents meeting certain qualifying criteria is eligible for exemption.
Veteran Organizations	361.095		Both	(2)	Up to $10,000 assessed value, adjusted by CPI, of Funds, furniture, paraphernalia and regalia owned by certain charitable organizations as well as real estate and fixtures, is exempt. If the real estate is leased, the exemption does not apply to the portion so leased or rented.

Exemption Type	NRS Reference	NAC Reference	Property Type	Due Date for Application See Legend	Explanation
Volunteer Fire Departments	361.150		Both	(2)	All property is exempt, unless it is used for any purpose other than carrying out the legitimate functions of a volunteer fire department.
Water Users' Nonprofit Associations	361.073		Both	(2)	All property is exempt, unless it is used for any purpose other than carrying out the legitimate functions of a water users' nonprofit cooperative corporation.
Young Men's Christian Association	361.110		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*
Young Women's Christian Association	361.110		Both	(2)	All real and personal property is exempt, unless it is used for a purpose other than the legitimate functions of the organization. *See also Nevada Museum of Art.*

APPENDIX E

2021-22 PERSONAL PROPERTY MANUAL: VALUATION GUIDELINES

Determining Whether Fixtures are Real or Personal Property

NRS 361.333 requires that each major class of property be examined to determine whether there is equality of assessment. One of the principal classes of property is personal property, pursuant to NRS 361.227(4). Uniformity and equality of assessment thus depend on proper classification. Although NRS 361.035 defines real estate and NRS 361.030 defines personal property, in practice it is sometimes difficult to tell whether an item is personal property or a fixture that is part of the real estate. As the Attorney General stated in Opinion #41 (1963), "the classification depends on the facts of each particular case." The assessor is encouraged to consult the Division of Local Government Services and/or the District Attorney in difficult cases.

A fixture may be defined as an item that was originally personal property which has been installed or attached to land or an improvement in a permanent manner. There is an abundant amount of case law which discusses three tests often used in deciding whether an item is a fixture. The tests are:

1. Physical Annexation;
2. Constructive Annexation, also called Adaptation; and
3. Intent

Under the first test, annexation, an item is a fixture if it is attached to, imbedded in or permanently resting upon land or an improvement, or is attached by other means that are normally used for permanent installation, and cannot be removed without substantially damaging the item or the land or improvement with which it is being used. For example, an item which is attached to real property for stability and has quick disconnect attachments such as simple wiring and conduit connections may not meet the test for a permanent fixture.

Under the second test, constructive annexation, an item is a fixture if the use or purpose of an item that is not otherwise physically annexed to land or an improvement is so adapted that it is:

A. A necessary, integral or working part of the land or improvement;
B. Designed or committed for use with the land or improvement; or
C. So essential to the land or improvement that the land or improvement cannot perform its desired function without the nonattached item.

Using the constructive annexation test, if the purpose of the item is to augment the use of the improvement no matter how it is attached, such as an elevator, the item must be considered a fixture. Another example would be heating, ventilation, and air conditioning equipment (HVAC). Equipment used to heat, ventilate, or cool a structure is considered to be real property.

Permanently attached personal property may be temporarily removed for repair or renovation onsite and still be considered permanently attached. Permanently attached fixtures do not include movable tangible personal property that is attached for convenience, stability or an obviously temporary purpose.

Underlying both the physical or constructive annexation tests is a determination of intent. An assessor must consider whether the item is intended to be a permanent part of the land or improvement, taking into account physical or constructive annexation, and other objective manifestations of permanence. NAC 361.1127 provides examples of objective manifestations of permanence.

A trade fixture may be distinguished from a fixture. It is an item of personal property that is non-permanently attached to real property for the purpose of conducting a business or trade; and has a unique identity and function separate from the real property to which it is attached. NAC 361.11745 provides a definition of trade fixture.

Pursuant to NRS 361.244, a mobile or manufactured home becomes real property when the Assessor has listed it on the tax roll as real property. The classification of mobile and manufactured homes as real property may be made when the requirements enumerated in NRS 361.244(1) and (2) are met. This includes the issuance of a Real Property Notice by the Manufactured Housing Division of the Department of Business and Industry. Factory-built housing becomes real property once it is permanently affixed to the land. These housing units conform to the Uniform Building Code and are not titled. As such they are not personal property nor are they considered “conversions”. These “UBC” homes do not exhibit the HUD placards found on manufactured housing. Instead they may have a placard referencing NRS 461.080 and their serial numbers may begin with the characters “UBC”.

In general, personal property is defined by exception pursuant to NRS 361.030. Property that does not meet the criteria of real property is personal property. The Assessor should recognize that certain fixtures such as bars, stages, walk-in coolers, or bank drive-ups, may already be included in the real property component of the Assessor’s Taxable Value. The Assessor should review the differing building occupancies of the Marshall-Swift cost manuals to ensure that a component of real or personal property is not double-assessed. The improper classification of any component of taxable property as real or personal does not render the valuation void or invalid.

For further research and explanation, please consult:

Attorney General Opinion 2012-10 (10-31-2012) (as it applies to fixtures, not to trade fixtures)
Attorney General Opinion #41 (1963)
Attorney General Opinion No. 2000-04
Marvin Arnold, Respondent, v. Goldfield Third Chance Mining Co, 32 Nev. 447; 109 P. 718 (1910)
National Advertising Co. v. State Department of Transportation, 116 Nev. Adv. Op. No. 10, (Feb. 2, 2000)
Fondren, et al, v. K/L Complex Ltd., et al., 106 Nev. 705; 800 P.2d 719; (1990)
Morse Signal Devices of California v. County of Los Angeles, 161 Cal. App. 3d 570; 207 Cal Rptr. 742 (1984)
Crocker National Bank v. City and County of San Francisco, 782 P.2d 278 (1989)
State v. Pioneer Citizens Bank of Nevada, 85 Nev. 395 (1969)
Kaiser Co. v. *Reid* (1947) 30 Cal.2d 610

References:

International Association of Assessing Officers, Standard on the Valuation of Personal Property, December, 2005. This publication may be obtained free of charge from the IAAO website at http://docs.iaao.org/media/standards/StandardValuationPersonalProperty.pdf

The Appraisal Institute: The Appraisal of Real Estate, 14th Edition, Chicago: 2013

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2021-22 PERSONAL PROPERTY MANUAL

Additional NRS & NAC

NRS 361.227 Determination of taxable value.

1. Any person determining the taxable value of real property shall appraise:

(a) The full cash value of:

(1) Vacant land by considering the uses to which it may lawfully be put, any legal or physical restrictions upon those uses, the character of the terrain, and the uses of other land in the vicinity.

(2) Improved land consistently with the use to which the improvements are being put.

(b) Any improvements made on the land by subtracting from the cost of replacement of the improvements all applicable depreciation and obsolescence. Depreciation of an improvement made on real property must be calculated at 1.5 percent of the cost of replacement for each year of adjusted actual age of the improvement, up to a maximum of 50 years.

2. The unit of appraisal must be a single parcel unless:

(a) The location of the improvements causes two or more parcels to function as a single parcel;

(b) The parcel is one of a group of contiguous parcels which qualifies for valuation as a subdivision pursuant to the regulations of the Nevada Tax Commission; or

(c) In the professional judgment of the person determining the taxable value, the parcel is one of a group of parcels which should be valued as a collective unit.

3. The taxable value of a leasehold interest, possessory interest, beneficial interest or beneficial use for the purpose of NRS 361.157 or 361.159 must be determined in the same manner as the taxable value of the property would otherwise be determined if the lessee or user of the property was the owner of the property and it was not exempt from taxation, except that the taxable value so determined must be reduced by a percentage of the taxable value that is equal to the:

(a) Percentage of the property that is not actually leased by the lessee or used by the user during the fiscal year; and

(b) Percentage of time that the property is not actually leased by the lessee or used by the user during the fiscal year, which must be determined in accordance with NRS 361.2275.

4. The taxable value of other taxable personal property, except a mobile or manufactured home, must be determined by subtracting from the cost of replacement of the property all applicable depreciation and obsolescence. Depreciation of a billboard must be calculated at 1.5 percent of the cost of replacement for each year after the year of acquisition of the billboard, up to a maximum of 50 years.

5. The computed taxable value of any property must not exceed its full cash value. Each person determining the taxable value of property shall reduce it if necessary to comply with this requirement. A person determining whether taxable value exceeds that full cash value or whether obsolescence is a factor in valuation may consider:

(a) Comparative sales, based on prices actually paid in market transactions.

(b) A summation of the estimated full cash value of the land and contributory value of the improvements.

(c) Capitalization of the fair economic income expectancy or fair economic rent, or an analysis of the discounted cash flow.

Ê A county assessor is required to make the reduction prescribed in this subsection if the owner calls to his or her attention the facts warranting it, if the county assessor discovers those facts during physical reappraisal of the property or if the county assessor is otherwise aware of those facts.

6. The Nevada Tax Commission shall, by regulation, establish:

(a) Standards for determining the cost of replacement of improvements of various kinds.

(b) Standards for determining the cost of replacement of personal property of various kinds. The standards must include a separate index of factors for application to the acquisition cost of a billboard to determine its replacement cost.

(c) Schedules of depreciation for personal property based on its estimated life.

(d) Criteria for the valuation of two or more parcels as a subdivision.

7. In determining, for the purpose of computing taxable value, the cost of replacement of:

(a) Any personal property, the cost of all improvements of the personal property, including any additions to or renovations of the personal property, but excluding routine maintenance and repairs, must be added to the cost of acquisition of the personal property.

(b) An improvement made on land, a county assessor may use any final representations of the improvement prepared by the architect or builder of the improvement, including, without limitation, any final building plans, drawings, sketches and surveys, and any specifications included in such representations, as a basis for establishing any relevant measurements of size or quantity.

8. The county assessor shall, upon the request of the owner, furnish within 15 days to the owner a copy of the most recent appraisal of the property, including, without limitation, copies of any sales data, materials presented on appeal to the county board of equalization or State Board of Equalization and other materials used to determine or defend the taxable value of the property.

9. The provisions of this section do not apply to property which is assessed pursuant to NRS 361.320.

(Added to NRS by 1965, 1445; A 1969, 1451; 1975, 65, 1656; 1977, 1318; 1979, 79; 1981, 788, 789; 1983, 1047, 1884, 1885; 1987, 2075; 1989, 668, 1818; 1993, 2312; 1997, 1111; 1999, 1029; 2001, 842; 2003, 2758; 2009, 1216; 2013, 3116)

NRS 361.345 Power of county board of equalization to change valuation of property; review of changes in valuation and estimation of certain property by county assessor; notice of addition to assessed valuation.

1. Except as otherwise provided in subsection 2, the county board of equalization may:

(a) Determine the valuation of any real or personal property placed on:

(1) The secured tax roll which was assessed by the county assessor; or

(2) The unsecured tax roll which was assessed by the county assessor on or after May 1 and on or before December 15; and

(b) Change and correct any valuation found to be incorrect either by adding thereto or by deducting therefrom such sum as is necessary to make it conform to the taxable value of the property assessed, whether that valuation was fixed by the owner or the county assessor. The county board of equalization may not reduce the assessment of the county assessor unless it is established by a preponderance of the evidence that the valuation established by the county assessor exceeds the full cash value of the property or is inequitable. A change so made is effective only for the fiscal year for which the assessment was made. The county assessor shall each year review all such changes made for the previous fiscal year and maintain or remove each change as circumstances warrant.

2. If a person complaining of the assessment of his or her property:

(a) Has refused or, without good cause, has neglected to give the county assessor the person's list under oath, as required by NRS 361.265; or

(b) Has, without good cause, refused entry to the assessor for the purpose of conducting the physical examination required by NRS 361.260,

Ê the county assessor shall make a reasonable estimate of the property and assess it accordingly. No reduction may be made by the county board of equalization from the assessment of the county assessor made pursuant to this subsection.

3. If the county board of equalization finds it necessary to add to the assessed valuation of any property on the assessment roll, it shall direct the clerk to give notice to the person so interested by registered or certified letter, or by personal service, naming the day when it will act on the matter and allowing a reasonable time for the interested person to appear.

[Part 18:344:1953; A 1954, 29]—(NRS A 1969, 95; 1981, 796; 1985, 1435; 1991, 2097; 1997, 1576; 2003, 2764; 2005, 2657; 2009, 1219)

NRS 361.360 Appeals to State Board of Equalization.

1. Any taxpayer aggrieved at the action of the county board of equalization in equalizing, or failing to equalize, the value of his or her property, or property of others, or a county assessor, may file an appeal with the State Board of Equalization on or before March 10 and present to the State Board of Equalization the matters complained of at one of its sessions. If March 10 falls on a Saturday, Sunday or legal holiday, the appeal may be filed on the next business day.

2. All such appeals must be presented upon the same facts and evidence as were submitted to the county board of equalization in the first instance, unless there is discovered new evidence pertaining to the matter which could not, by due diligence, have been discovered before the final adjournment of the county board of equalization. The new evidence must be submitted in writing to the State Board of Equalization and served upon the county assessor not less than 7 days before the hearing.

3. Any taxpayer whose real or personal property placed on the unsecured tax roll was assessed after December 15 but before or on the following April 30 may likewise protest to the State Board of Equalization. Every such appeal must be filed on or before May 15. If May 15 falls on a Saturday, Sunday or legal holiday, the appeal may be filed on the next business day. A meeting must be held before May 31 to hear those protests that in the opinion of the State Board of Equalization may have a substantial effect on tax revenues. One or more meetings may be held at any time and place in the State before November 1 to hear all other protests.

4. The State Board of Equalization may not reduce the assessment of the county assessor if:

(a) The appeal involves an assessment on property which the taxpayer has refused or, without good cause, has neglected to include in the list required of the taxpayer pursuant to NRS 361.265 or if the taxpayer has refused or, without good cause, has neglected to provide the list to the county assessor; or

(b) The taxpayer has, without good cause, refused entry to the assessor for the purpose of conducting the physical examination authorized by NRS 361.260.

5. Any change made in an assessment appealed to the State Board of Equalization is effective only for the fiscal year for which the assessment was made. The county assessor shall review each such change and maintain or remove the change as circumstances warrant for the next fiscal year.

6. If the State Board of Equalization determines that the record of a case on appeal from the county board of equalization is inadequate because of an act or omission of the county assessor, the district attorney or the county board of equalization, the State Board of Equalization may remand the case to the county board of equalization with directions to develop an adequate record within 30 days after the remand. The directions must indicate specifically the inadequacies to be remedied. If the State Board of Equalization determines that the record returned from the county board of equalization after remand is still inadequate, the State Board of Equalization may hold a hearing anew on the appellant's complaint or it may, if necessary, contract with an appropriate person to hear the matter, develop an adequate record in the case and submit recommendations to the State Board. The cost of the contract and all costs, including attorney's fees, to the State or the appellant necessary to remedy the inadequate record on appeal are a charge against the county.

[Part 20:344:1953]—(NRS A 1971, 507; 1975, 1665; 1981, 798; 1983, 685, 1902; 1985, 894, 1436; 1993, 95; 1997, 1577; 2003, 2766; 2007, 1884; 2011, 1876)

NRS 361.767 Assessment of personal property that was not assessed or was underassessed.

1. If the county assessor determines that certain personal property was not assessed, the assessor may assess the property based upon its taxable value in the year in which it was not assessed.

2. If the county assessor determines that certain personal property was underassessed because it was incorrectly reported by the owner, the assessor may assess the property based upon its taxable value in the year in which it was underassessed. He or she may then send an additional tax bill for an amount which represents the difference between the reported value and the taxable value for each year.

3. The assessments provided for in subsections 1 and 2 may be made at any time within 3 years after the end of the fiscal year in which the taxes would have been due. The tax bill must specify the fiscal year for which the tax is due and the applicable rate and whether it is for property which was not assessed or for property which was underassessed.

4. If property is not assessed or is underassessed because the owner submitted an incorrect written statement or failed to submit a written statement required pursuant to subsection 1 of NRS 361.265, there must be added to the taxes due a penalty in the amount of 20 percent of the tax for each year the property was not assessed or was underassessed. The county assessor may waive this penalty if he or she finds extenuating circumstances sufficient to justify the waiver.

(Added to NRS by 1987, 530; A 1999, 2774)

NRS 701A.370 Duration, amount and other terms of partial abatement; notice of abatement; distribution of certificate of eligibility by Director. [Effective through June 30, 2049.]

1. If the Director approves an application for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive, of:

(a) Property taxes imposed pursuant to chapter 361 of NRS, the partial abatement must:

(1) Be for a duration of the 20 fiscal years immediately following the date of approval of the application;

(2) Be equal to 55 percent of the taxes on real and personal property payable by the facility each year; and

(3) Not apply during any period in which the facility is receiving another abatement or exemption from property taxes imposed pursuant to chapter 361 of NRS, other than any partial abatement provided pursuant to NRS 361.4722.

(b) Local sales and use taxes:

(1) The partial abatement must:

(I) Be for the 3 years beginning on the date of approval of the application;

(II) Be equal to that portion of the combined rate of all the local sales and use taxes payable by the facility each year which exceeds 0.6 percent; and

(III) Not apply during any period in which the facility is receiving another abatement or exemption from local sales and use taxes.

(2) The Department of Taxation shall issue to the facility a document certifying the abatement which can be presented to retailers at the time of sale. The document must clearly state that the purchaser is only required to pay sales and use taxes imposed in this State at the rate of 2.6 percent.

2. Upon approving an application for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive, the Director shall immediately forward a certificate of eligibility for the abatement to:

(a) The Department of Taxation;

(b) The board of county commissioners;

(c) The county assessor;

(d) The county treasurer; and

(e) The Office of Economic Development.

(Added to NRS by 2009, 2004, 2010; A 2009, 2010; 2011, 2073, 2896, 3481; 2013, 3427; 2015, 2955)

NAC 361.1117 "Cost of replacement" defined. (NRS 360.090, 360.250) "Cost of replacement" means the total cost of construction required to replace an improvement with a substitute of like or equal utility using current standards of materials and design, including the cost of any pertinent labor, materials, supervision, contractors' profit and overhead, architects' plans and specifications, sales taxes and insurance.

(Added to NAC by Tax Comm'n by R039-10, 8-13-2010, eff. 7-1-2012)

NAC 361.11745 "Trade fixture" defined. (NRS 360.090, 360.250) "Trade fixture" means an item of personal property that:

1. Is installed or attached nonpermanently to real property by an owner or tenant for the purpose of conducting a business or trade and not for the enhancement of the real property to which it is installed or attached; and

2. Has a unique identity and function which is related to the business or trade for which it is installed or attached and which is distinct from the real property to which it is installed or attached.

(Added to NAC by Tax Comm'n by R068-12, eff. 9-14-2012)

NAC 361.1351 "Acquisition cost" and "original cost" defined. (NRS 360.090, 360.250, 361.227) "Acquisition cost" or "original cost" means the actual cost of property to its present owner, including, without limitation, the costs of transportation and the costs of installation.

(Added to NAC by Tax Comm'n by R034-03, eff. 12-4-2003)

NAC 361.1371 Procedure for determination of taxable value. (NRS 360.090, 360.250, 361.227)

1. The taxable value of personal property must be determined by adjusting the acquisition cost of the property by a cost-index factor and reducing the adjusted acquisition cost by an estimate of applicable depreciation. The taxable value so determined shall be deemed to be the indicator of value of replacement cost new less depreciation.

2. In determining taxable value, a county assessor shall use the schedules in the *Personal Property Manual* that show the cost-index factors, the rates of depreciation and the percent good by year. The assessor shall use the schedules by:

(a) Selecting the appropriate expected useful life of the personal property; and

(b) Selecting the appropriate cost-index factor, based on the year of acquisition of the property, and applying it to the acquisition cost of the property.

Ê The result shall be deemed to be the replacement cost new of the property.

3. The assessor shall select the method of applying depreciation to the personal property by either:

(a) Multiplying the adjusted acquisition cost of the property by the rate of depreciation and subtracting the result from the adjusted acquisition cost; or

(b) Multiplying the adjusted acquisition cost of the property by the percent-good factor.

Ê The result from either approach shall be deemed to be the taxable value of the property.

(Added to NAC by Tax Comm’n by R034-03, eff. 12-4-2003)

ITC Legislation

Legislation	Enacted Date	Availability Period & Details - Credit First Established
Energy Tax Act of 1978	11/9/1978	10/1/1978 – 12/31/1982 10% for solar and wind (refundable)
Crude Oil Windfall Profit Tax Act of 1980	4/2/1980	1/1/1980 – 12/31/1985 – 15% for solar and wind (non-refundable) – Additional technologies now eligible
Tax Reform Act of 1986	10/22/1986	1/1/1986 – 12/31/1986 15% 1/1/1987 – 12/31/1987 12% 1/1/1988 – 12/31/1988 10%
Technical and Miscellaneous Revenue Act of 1988	11/10/1988	1/1/1989 – 12/31/1989 10%
Omnibus Budget Reconciliation Act of 1989	12/19/1989	1/1/1990 – 9/30/1990 10%
Omnibus Budget Reconciliation Act of 1990	11/5/1990	10/1/1990 – 12/31/1991 10%
Tax Extension Act of 1991	12/11/1991	1/1/1992 – 6/30/1992 10%
Energy Policy Act of 1992	10/24/1992	10% credit made permanent
Energy Policy Act of 2005	8/8/2005	1/1/2006 – 12/31/2007 30% – Residential systems made eligible
Tax Relief and Health Care Act of 2006	12/20/2006	1/1/2007 – 12/31/2008 30%
Emergency Economic Stabilization Act of 2008	10/3/2008	1/1/2009 – 12/31/2016 30% – Credit allowed to offset Alt. Minimum Tax – Small Wind (100 kW or less) made eligible, capped at $4,000
American Recovery and Reinvestment Act of 2009	2/17/2009	– Ability to claim ITC in lieu of PTC (must be placed in service in 2009 – 2012, later extended)

		– Ability to claim grant in lieu of ITC (must commence construction in 2009 or 2010, later extended to 2011)
Tax Increase Prevention Act of 2014	12/19/2014	– ITC in lieu of PTC extended retroactively through 12/31/2014
Consolidated Appropriations Act of 2016	12/18/2015	1/1/2017 – 12/31/2021 – Credit expiration changed to commenced construction date from placed in service date – ITC in lieu of PTC extended retroactively through 12/31/2019 for wind – Phaseout for solar introduced: – 26% ITC in 2020 – 22% ITC in 2021 – 10% ITC in 2022 and thereafter
Bipartisan Budget Act of 2018	2/9/2018	– ITC expiration date for non-solar technologies extended and phaseout introduced: – 26% ITC in 2020 – 22% ITC in 2021
Consolidated Appropriations Act of 2021	12/27/2020	— Phaseout amended – 26% ITC in 2020 – 2022 – 22% ITC in 2023 – New tax credit for offshore wind
Inflation Reduction Act	8/16/2022	1/1/2022 – 12/31/2024 – Transitioning to technology-neutral credit through 2034 or later – Labor provisions – Bonus Credits

Whiteco Industries, Inc. v. Commissioner, 65 T.C. 664 (1975)

Dec. 31, 1975 · United States Tax Court · Docket Nos. 3918-73, 3919-73, 7188-74

65 T.C. 664

Whiteco Industries, Inc., et al., 1 Petitioners*v.*Commissioner of Internal Revenue, Respondent

John S. Pennell, Don S. Harnack, and *George W. Benson,* for the petitioners.
Harmon B. Dow, for the respondent.

1

Cases of the following petitioners are consolidated herewith: Whiteco Industries, Inc., and Subsidiaries, docket Nos. 3919-73 and 7188-74.

**670*OPINION

We must decide whether the petitioner's outdoor advertising signs may qualify for the investment credit of section 38.

Property can qualify for the investment credit only if it constitutes "section 38 property." Such term is defined in section 48(a)(l), which provides in relevant part:

(a) Section 38 Property.—

(1) In GENERAL. — * * * the term "section 38 property" means—

(A) tangible personal property, or

(B) other tangible property (not including a building and its structural components) but only if such property—

(i) is used as an integral part of manufacturing, production, or extraction or of furnishing transportation, communications, electrical energy, gas, water, or sewage disposal services, * * *

The petitioner argues that the outdoor advertising signs qualify for the investment credit either as "tangible personal property" within the meaning of section 48(a)(1)(A) or as "other tangible property" within the meaning of section 48(a)(1)(B). We hold that the signs constitute "tangible personal property." In light of our holding, we do not address the petitioner's alternative contention.

Although this Court has not ruled on the type of property in issue herein, the Court of Claims recently held, in two companion cases, *Alabama Displays, Inc. v. United States,* 507 F. 2d 844 (1974), and *National Advertising Co. v. United States,* 507 F. 2d 850 (1974), that outdoor advertising signs, indistinguishable from the ones before us, constitute tangible personal property. We believe the result reached by the Court of Claims is sound, and for the reasons set forth hereinafter, we reach the same result.

The statute contains no definition of the term "tangible personal property," but committee reports relating to the enactment of the investment credit do contain many statements which are helpful in understanding the types of property intended to be included within the term. The Income Tax Regulations also contain many relevant guidelines. The technical explanations at*671tached to the House and Senate committee reports provide that the term "tangible personal property" for purposes of section 48:

includes any tangible property except land, and improvements thereto, such as buildings or other inherently permanent structures thereon (including items which are structural componente of such buildings or structures). * * * [H. Rept. No. 1447, 87th Cong., 2d Sess. (1962), 1962-3 C.B. 405, 515-516; S. Rept. No. 1881, 87th Cong., 2d Sess. (1962), 1962-3 C.B. 707,858.]

Thus, all tangible property constitutes tangible personal property unless it is excluded because it is land or an improvement thereto. A building is given as an example of an improvement, but the common characteristic which is attributed to improvements is that they are "inherently permanent structures." Section 1.48-1(c), Income Tax Regs., adopts the same definition of tangible personal property as that given in the technical explanations to the committee reports, and the regulations characterize improvements as "inherently permanent structures."[3] Accordingly, as both parties recognize, resolution of the issue before us turns on whether the petitioner's outdoor advertising signs are "inherently permanent structures."

The term "inherently permanent structure" does not describe a clearly recognizable or defined class of property. The committee report also states: "Tangible personal property is not intended to be defined narrowly here, nor to necessarily follow the rules of State law." H. Rept. No. 1447, *supra,* 1962-3 C.B. at 415. Thus, although under State law, fixation to the land is a basis for distinguishing personal property from other property, such basis is not to be relied upon for purposes of deciding what property may qualify for the investment credit. Such a rule is illustrated by the following statement in the committee report:

Assets accessory to the operation of a business, such as machinery, printing presses, transportation or office equipment, refrigerators, individual air-conditioning unite, grocery counters, testing equipment, display racks and shelves, etc., generally constitute tangible personal property for purposes of section 48, *even though such assets may be termed fixtures under local law.**** [S. Rept. No. 1881, *supra,* 1962-3 C.B. at 858; emphasis supplied.]

See also H. Rept. No. 1447, *supra,* 1962-3 C.B. at 516.

*672In line with such legislative history and regulations, the decided cases have held that affixation to land does not per se exclude the property from the category of tangible personal property. See *Kenneth D. LaCroix,* 61 T.C. 471, 488 (1974); *Estate of Shirley Morgan,* 52 T.C. 478, 483 (1969), affd. per curiam 448 F. 2d 1397 (9th Cir. 1971). In deciding whether property is to be classified as tangible personal property for purposes of the investment credit, the courts have developed several questions to be considered:

(1) Is the property capable of being moved, and has it in fact been moved? *Alabama Displays, Inc. v. United States,* 507 F. 2d. at 849; *Joseph Henry Moore,* 58 T.C. 1045, 1052 (1972), affd. per curiam 489 F. 2d 285 (5th Cir. 1973). The evidence clearly shows that the petitioner's signs are capable of being moved and have in fact been moved.

(2) Is the property designed or constructed to remain permanently in place? *Joseph B. Weirick,* 62 T.C. 446, 451 (1974); *C. C. Everhart,* 61 T.C. 328, 330 (1973); *Beverly R. Roberts,* 60 T.C. 861, 866 (1973). The evidence in this case indicates that the petitioner's signs are not designed or constructed to last permanently. They are designed or constructed to' last for the term of a contract between the petitioner and one of its advertisers. On the average, the term of a contract will last only 5 years. At the end of such period, the sign structure requires substantial renovation. A new sign face must be attached, some stringers must be replaced, and poles are either replaced or straightened and recemented.

(3) Are there circumstances which tend to show the expected or intended length of affixation, i.e., are there circumstances which show that the property may or will have to be moved? *Alabama Displays, Inc. v. United States, supra; Kenneth D. LaCroix,* 61 T.C. at 487. The petitioner does not intend, nor could it realistically expect, the signs to remain permanently in place. The petitioner realizes that in numerous situations it may have to move its signs at the expiration of a contract with an advertiser, or prior thereto. The signs may have to be moved because the owner of the leased land does not renew the lease or exercises his option to develop his land, or because there is a change in the location of the road or the occurrence of some other condition which makes the position of the sign no longer desirable. The Court of Claims placed great emphasis upon such **673*facts to demonstrate the inherently temporary nature of the affixation of the signs therein. *Alabama Displays, Inc. v. United States,* 507 F. 2d at 845; *National Advertising Co. v. United States,* 507 F. 2d at 851-852. Such court also used such facts to distinguish the signs therein from the pilings which were used to secure a floating dock and which we found were not tangible personal property. *Estate of Shirley Morgan, supra.*

(4) How substantial a job is removal of the property and how time-consuming is it? Is it "readily removable"? *Estate of Shirley Morgan,* 52 T.C. at 483. The disassembly and removal of a sign is a' relatively quick and easy process. Although specific figures were not supplied for the time necessary to remove the sign face and the stringers, it appears that the process may be accomplished quickly, using merely a hammer and a sledge hammer or an ax. Removal of the poles for a 40-foot sign takes only an hour or an hour and a half.

(5) How much damage will the property sustain upon its removal? *King Radio Corp. v. United States,* 486 F. 2d 1091, 1096 (10th Cir. 1973). Much of the sign assembly is not damaged when it is moved. The only necessary wastage is that portion of the poles surrounded by concrete, but the remaining portions of the poles are used for other signs. If the sign is moved upon the expiration of a contract with an advertiser, the sign face is also replaced.

(6) What is the manner of affixation of the property to the land? *Joseph B. Weirick, supra; C. C. Everhart, supra; Beverly R. Roberts, supra.* The poles on which the petitioner's signs are mounted are placed in the ground and surrounded by concrete; yet, such poles can easily be removed from the ground, and as a matter of practice, they are so removed.

In our judgment, the application of these criteria to the facts of this case leads to the conclusion that the outdoor advertising signs of the petitioner were not inherently permanent. They were not'expected to last indefinitely; inevitably, they would have to be moved in a relatively short time; and they could be removed easily. Such signs are manifestly less permanent in nature than other properties which the courts have found to be tangible personal property for purposes of the investment credit: *King Radio Corp. v. United States, supra; Minot Federal Savings & Loan Assn. v. United States,* 435 F. 2d 1368 (8th Cir. 1970) (movable partition system fastened to the floor and ceiling by *674screws or masonry nails); *Marineland of the Pacific, Inc.,* T.C. Memo. 1975-288 (338-foot sky tower); *Joseph B. Weirick,* 62 T.C. 446 (1974) (holddown towers for a ski lift and its cable support as well as wooden passenger ramps); *Joseph Henry Moore,* 58 T.C. 1045 (1972) (mobile homes placed on concrete blocks); *Estate of Shirley Morgan,* 52 T.C. 478(1969)(a floating dock held down by pilings). Moreover, the Income Tax Regulations specifically provide that "neon and other signs, which * * * [are] contained in or attached to a building" are tangible personal property for purposes of the credit allowed by section 38. Sec. 1.48-l(c), Income Tax Regs. Certainly, such signs may be constructed, designed, and affixed in a much more permanent fashion than the signs of the petitioner.

In deciding what property qualifies for the investment credit as tangible personal property, some very subtle distinctions have been suggested. It is difficult to reconcile the position maintained by the Commissioner in this case with his own rulings. He has allowed property, far more inherently permanent than the petitioner's signs, to qualify: Rev. Rul. 74-602, 1974-2 C.B. 12 (gasoline storage tanks of approximately 8,000-gallon capacity (located usually below ground but some above ground and not generally moved during useful life) and associated piping in a retail gasoline station); Rev. Rul. 71-104,1971-1 C.B. 5 (burner and 14-story preheater structure for cement kiln facility); Rev. Rul. 70-236,1970-1 C.B. 8 (liquified petroleum gas equipment); Rev. Rul. 70-160,1970-1 C.B. 7 (boiler facility to produce steam used in the manufacture of furniture); Rev. Rul. 70-103,1970-1 C.B. 6 (a diesel generator, fuel tanks, exhaust equipment, a chlorinator, vault doors with combination locks, dehumidifiers, pumps, space heaters, safety doors, and louvers); Rev. Rul. 69-602, 1969-2 C.B. 6 (propane gas storage tanks and water heaters installed on customers' premises); Rev: Rul. 69-557,1969-2 C.B. 3 (dry kiln structures to remove moisture from wood); Rev. Rul. 67-349, 1967-2 C.B. 48 (wall-to-wall carpeting installed in guest rooms, office space, bar areas, and dining rooms of a motel); and Rev. Rul. 65-79, 1965-1 C.B. 26 (bank vault doors, night depository facilities, walk-up and drive-up teller's windows). As a court, we must be guided by rational principles in making our decisions, and if those items of property are to be treated as tangible personal property, we see no rational basis for disqualifying the petitioner's outdoor advertising signs.

*675The Commissioner argues that the petitioner's signs cannot qualify as tangible personal property, in any event, because the House committee report specifically excludes such outdoor advertising signs. The passage on which he relies is:

In order to qualify for the credit, property (other than tangible personal property and research or storage facilities used in the specified activities) must be used as an integral part of one or more of the specified activities. Thus, for example, section 38 property would ordinarily not include such assets as pavements, parking areas, *advertising displays,* outdoor lighting facilities, or swimming pools which, although used as a part of the overall business operation, are not used directly in the specified activities. * * * [H. Rept. No. 1447, supra, 1962-3 C.B. at 517; emphasis supplied.]

This same argument was rejected by the Court of Claims in *Alabama Displays, Inc. v. United States,* 507 F. 2d 844 (1974). We also believe the argument is misplaced and therefore reject it.

There- are a number of reasons for rejecting the Commissioner's argument. In the first place, it is not clear as to what is meant by the term "advertising displays." There is some indication that the term may have been used to refer to show windows. A spokesman for the American Retail Federation appeared before the Senate Finance Committee and urged the committee to allow the investment credit with respect to a retailer's show windows, and it may have been those show windows to which the committee meant to refer. Hearings Before the Senate Committee on Finance on H.R. 10650, 87th Cong., 2d Sess., part 3, 1019 (1962). In. addition, it is not clear that the committee had .in mind such property as the petitioner's signs. The committee may have intended to indicate merely that the advertising displays of a person engaged in manufacturing or production were not an integral part of his business, and the committee may not have intended to make any reference to a person who was in the advertising business. The Court of Claims adopted this view of the language in the legislative history. *Alabama Displays, Inc. v. United States, supra*. Moreover, the committee merely indicated that advertising displays are not ordinarily to qualify for the investment credit, but the committee may have had in mind advertising displays that were much more substantial and more permanent than the petitioner's signs..For these reasons, we are not persuaded that the committee intended to indicate that outdoor advertising signs of the type *676erected by the petitioner could not qualify for the investment credit.

Decisions will be entered under Rule 155.

3
Sec. 1.48-l(c), Income Tax Regs., in relevant part, provides:

(c) *Definition of tangible personal property*. * * * For purposes of this section, the term "tangible personal property" means any tangible property except land and improvements thereto, such as buildings or *other inherently permanent structures* (including items which are structural components of such buildings or structures). * * * [Emphasis supplied.]

WHETHER ASSET IS STRUCTURAL OR PERSONAL PROPERTY IS FACTUAL TEST

ILM 199921045

APR. 1, 1999

Citations: ILM 199921045

UIL: 9999.9800

Release Date: 5/28/1999

Date: April 1, 1999

CC:DOM:FS:P&SI

SPR-122705-98

MEMORANDUM FOR JOSEPH M. ABELE

CC:NER:PEN:PHI

ASSISTANT DISTRICT COUNSEL

FROM:

HARVE M. LEWIS

CHIEF, PASSTHROUGHS & SPECIAL INDUSTRIES

(FIELD SERVICE DIVISION)

SUBJECT:

Depreciation/HCA-SPR-122705-98

[1] You have asked for our response as to the position that examiners should take in light of the Tax Court's decision in Health Corp. of America, Inc. v. Commissioner, 109 T.C. 21 (1997) ("HCA"). In the following discussion we review the factors relevant to a determination of whether an item is a structural component of a building or tangible personal property, as well as what facts and circumstances may be of special concern to examiners. The determination is still a highly factual one, with no bright line tests.

[2] In HCA petitioners argued that several disputed items associated with facilities built in the 1980's constituted Internal Revenue Code section 1245 property and therefore were appropriately depreciated using a 5-year recovery period (pursuant to petitioner's business asset guideline class under ACRS and MACRS). The Commissioner countered that allowing these items to be depreciated over a different recovery period than the buildings to which they related resulted in component depreciation, which is no longer allowed under ACRS and MACRS. Further, the Commissioner argued that investment tax credit ("ITC") cases involving years prior to 1981, when the cost recovery system was adopted and component depreciation was disallowed, are of limited application in determining what constitutes a structural component. Finally, the Commissioner took the position that these items were structural components and thus section 1250 property and should be depreciated over the same recovery period as the building to which they relate.

[3] The Tax Court rejected the Commissioner's primary argument stating that in prohibiting component depreciation, Congress did not intend to redefine section 1250 property to include property which prior to the enactment of ACRS had been section 1245 property for the purposes of the ITC. The court looked at the statutory and regulatory language of ACRS and MACRS, as well as its legislative history and determined that to the extent disputed property would qualify as tangible personal property for ITC purposes under pre-1981 law, it will also qualify as tangible personal property for ACRS and MACRS.

[4] The court then turned to the Commissioner's contention that the disputed items were structural components under an ITC analysis. The court examined each category of disputed items to determine whether the assets should be characterized as section 1250 property, a structural component of the facility, or section 1245 property, tangible personal property under Treas. Reg. section 1.48- 1(c). In making this determination the court employed the factors set forth in Whiteco Indus., Inc. v. Commissioner, 65 T.C. 664, 672-673 (1975) to ascertain whether the items were inherently permanent and thus not tangible personal property within the meaning of Treas. Reg. section 1.48-1(c). These factors include: 1) Is the property capable of being moved, and has it in fact been moved?; 2) Is the property designed or constructed to remain permanently in place?; 3) Are there circumstances which tend to show the expected or intended length of affixation, i.e., are there circumstances which show that the property may or will have to be moved?; 4) How substantial a job is removal of the property and how time-consuming is it? Is it "readily removable?"; 5) How much damage will the property sustain upon its removal?; and 6) What is the manner of affixation of the property to the

land? HCA, 109 T.C. at 57 (citing Whiteco, 65 T.C. at 672. The presence of one factor is not the sole determinant of what is tangible personal property. Id.

[5] HCA went on to define structural components by way of example as set forth in section 1.48-1(e)(2):

The term "structural components" includes such parts of a building as walls, partitions, floors, and ceilings, as well as any permanent coverings therefor such as paneling or tiling; windows and doors; all components (whether in, on, or adjacent to the building) of a central air conditioning or heating system, including motors, compressors, pipes and ducts; plumbing and plumbing fixtures; such as sinks and bathtubs; electric wiring and lighting fixtures; chimneys; stairs; escalators, and elevators, including all components thereof; sprinkler systems; fire escapes; and other components relating to the operation or maintenance of a building. . . . the term "structural components" does not include machinery the sole justification for the installation of which is the fact that such machinery is required to meet temperature or humidity requirements which are essential for the operation of other machinery or the processing of materials or foodstuffs.

[6] The court summarized the regulation saying, "an item constitutes a structural component of a building if the item relates to the operation and maintenance of the building. . . ." HCA, 109 T.C. at 58. Be aware, however, that the list may be misleading. The HCA court followed Scott Paper Co. v. Commissioner, 74 T.C. 137, 182- 3 (1980) in determining that even though wiring is an example under Treas. Reg. section 1.48-1(e)(2), it is not a structural component unless it relates to the operation or maintenance of a building. HCA, 109 T.C. at 66. The focus, the court found, should be on ultimate use. Id. at 68. In addition, the Service has stated that it will not challenge the Scott Paper approach. Illinois Cereal Mills, Inc. v. Commissioner, T.C. Memo. 1983-469, action on decision, 1991-019 (Oct. 22, 1991).

[7] Again, the determination of whether an asset is a structural component or tangible personal property is a facts and circumstances assessment. As noted above, pre-1981 case law and factors set forth therein are still relevant to the assessment. In view of the factual nature of the inquiry, no bright line test exists.

[8] As a practical matter, it should be noted that the use of cost segregation studies must be specifically applied by the taxpayer. The HCA court sustained the Service's position that certain "allocated" equipment must be depreciated over the same period as the buildings to which they relate because the record did not provide any "logical and objective measure" of the portion of the equipment that would constitute section 1245 property. HCA, 109 T.C. at 92. An accurate cost segregation study may not be based on non- contemporaneous records, reconstructed data, or taxpayer's estimates or assumptions that have no supporting records. See Boddie-Noell Enterprises, Inc. v. United States, 36 Fed. Cl. 722, 746 (1996), aff'd without op. 132 F.2d 54 (Fed. Cir. 1997). Thus, cost segregation studies should be closely scrutinized by the field.

[9] Treas. Reg. section 1.167(e)-1(a) provides that any change in the method of computing the depreciation allowances with respect to a particular account is a change in method of accounting. Further, the legislative history underlying the statutory language of section 446(e) and former section 167(e) clearly indicates that a change in depreciation method is a change in method of accounting. The legislative history of section 446(e) provides that a change in method of accounting includes "a change in the treatment of a material item such as . . . a change in the method of depreciating any property." S. Rep. No. 1622, 83d Cong., 2d Sess. (1954). The legislative history of former section 167(e) provides that "[a]ll changes in depreciation method are changes in accounting method under section 446(e) and, therefore, will require the consent of the Secretary or his delegate." S. Rep. No. 1622, 83d Cong., 2d Sess. (1954). Also, in Standard Oil Co. v. Commissioner, 77 T.C. 349 (1981), which concerned a taxpayer that reclassified certain assets from section 1250 property to section 1245 property and then sought to use different depreciation methods, the Tax Court stated that it "is unquestioned that a change in the method of computing depreciation is a change in the method of accounting." 77 T.C. at 410. Thus, a change in depreciation method is a change in method of accounting.

[10] With respect to a change in recovery period or convention, Treas. Reg. section 1.446-1(e)(2)(ii)(a) indicates that such a change is a change in method of accounting. This section provides that a change in method of accounting includes a change in the treatment of any material item, and that a material item is any item that involves the proper time for the inclusion of the item in income or the taking of the item as a deduction. The recovery period determines the period of time over which the basis of depreciable property is recovered. The convention determines the portion of the taxable year for which depreciation is allowable and determines how much of the applicable recovery period remains as of the beginning of the taxable year following the placed-in-service year. A change in recovery period or convention affects when, not whether, the cost of depreciable property will be recovered. Consequently, a change in recovery period or convention affects the timing of deductions and is a change in method of accounting.

[11] Treas. Reg. section 1.446-1(e)(2)(i) provides that a taxpayer who changes the method of accounting employed in keeping his books shall, before computing his income using a new method for tax purposes, secure the consent of the Commissioner, whether or not such method is proper or is permitted under the Internal Revenue Code or the regulations thereunder.

Sincerely,

Harve M. Lewis

Chief

Passsthroughs & Special Industries

Branch (Field Service)

KPMG

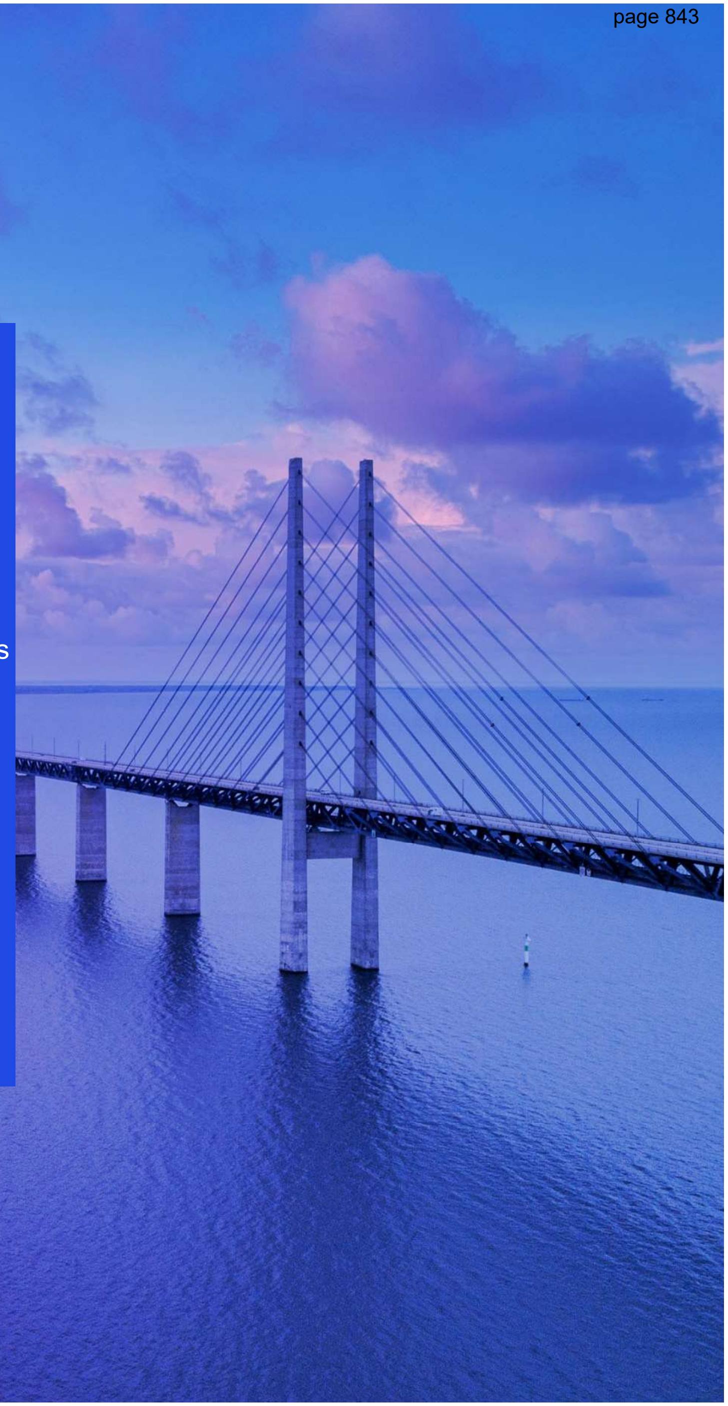
Townsite Solar, LLC

KPMG Valuation and Business Modeling Services

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes

As of July 1, 2023

kpmg.com



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October 8, 2024

Mr. Eric Huswick
Vice President, Finance
Townsite Solar, LLC
8800 N Gainey Ctr Dr
Suite 100
Scottsdale, AZ 85258

Dear Mr. Huswick:

KPMG LLP ("KPMG") has completed its engagement to assist Townsite Solar, LLC (the "Client") with the fair market value ("FMV") of certain tangible and intangible assets (the "Subject Assets") of the Townsite solar project ("Townsite" or the "Project") as of July 1, 2023 (the "Valuation Date").

Townsite Solar Project ("Townsite Solar" or "Project") is a 195 MWac solar PV + 90 MWac storage facility that came online on November 30, 2021, in Boulder City, Nevada. The Client engaged KPMG to perform a valuation of the Project in order to assist with the property tax assessment for the Project.

This memorandum represents a summary of the oral report provided to Client regarding our considerations and conclusions. This memorandum does not qualify as a Restricted Appraisal Report in accordance with Standards 9 and 10 of the Uniform Standards of Professional Appraisal Practice ("USPAP"). This memorandum summarizes the appraisal procedures and conclusions developed. This memorandum is supported by additional information within our work files which may be needed to fully understand our conclusions and certain assumptions. This memorandum considers information provided to us as of the date of this memorandum and may not be updated should additional information become available subsequent to this memorandum date.

We understand that out memorandum and conclusions will be utilized for tax reporting purposes in relation to the property tax assessment. No other use is intended or implied.

Standard of value

The standard of value for tax reporting purposes is FMV, which is defined in Revenue Ruling 59-60 as:

> *The price at which the subject property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of the relevant facts.*

Scope of engagement

As previously discussed, we will provide valuation estimates for the FMV of the Subject Assets owned by the Project in addition to the business enterprise value ("BEV") of the Project. The Subject Assets include:

- Property, plant, and equipment ("PP&E")
- Power purchase agreement ("Power Purchase Agreement") [1]

Based on our understanding of the objectives of the engagement, the scope of our analysis included the following general elements:

- Interviews with management of the Client ("Management") to gain a more thorough understanding of the details of the Project
- Consideration of the economic and competitive environment, including the industry in which the Project operates to assess current and anticipated trends
- Preliminary and final valuation analyses of the Subject Assets as of the Valuation Date for tax reporting and compliance purposes in connection with the property tax assessment

During the course of our valuation analysis, we were provided with unaudited financial projections and operational data regarding the Project. We have had discussions with Management to understand certain key inputs used in the projected financial information. Without independent verification, we have relied upon the data provided by Management as accurately reflecting the results of the operations and financial position of the Project. We, as valuation consultants, have not audited this data and express no opinion or other form of assurance regarding its accuracy or fairness of presentation.

[1] The PPAs were valued to determine whether a favorable contract was held as of the Valuation Date, ascribing value to an intangible asset.

Our memorandum is limited to issues concerning fair market value for the property tax assessment pursuant to Internal Revenue Service Ruling 59-60. Additional issues may exist that could affect the tax treatment of the Project that is the subject of our memorandum. Our memorandum does not consider or provide a conclusion regarding any additional issues. Written advice provided to you under this engagement letter is based on facts, representations, assumptions, and other information you provided to us, the completeness, accuracy and timeliness of which are critical factors in our ability to timely and accurately complete our services. Unless you request and we agree under a separate writing (a newly issued engagement letter or addendum to our engagement letter) after our advice has been issued in final form to you, KPMG will not update our advice to take into account your updating the facts you provide to us through your discovery of new or additional facts, or your updating any information that may have formed the basis of any assumptions we made in developing our advice. In rendering advice, we consider tax authorities that are subject to change, retroactively and/or prospectively, and any such changes could affect the advice contained in this report.

The advice or other information in this document was prepared for the sole benefit of KPMG's client and may not be relied upon by any other person or organization. KPMG accepts no responsibility or liability in respect of this document to any person or organization other than KPMG's client.

Our memorandum is subject to the terms and conditions set forth in our engagement letter and the limiting assumptions set forth in Appendix C. We understand that the valuation report is not supporting a U.S. "listed transaction" or any transaction that is substantially similar to a federal or state "listed transaction."

Our opinions and conclusions were delivered in the form of an oral report and are summarized in this memorandum. Our work paper files contain additional documentation that supports our analyses and conclusions. The value opinions expressed in this appraisal are contingent upon the analysis, facts, and conditions presented in the memorandum and accompanying schedules.

Disclosure of subsequent events

KPMG is not aware of any material subsequent events impacting the fair market values assigned to the Project between the Valuation Date and the date of this report.

KPMG

Conclusion

Based on our analysis, it is our opinion that FMV of the Subject Assets as of the Valuation Date are as follows:

Concluded Range of FMV of the Subject Assets (USD thousands)

Summary of Values	Low	High
PP&E	**288,500**	**298,000**
Power Purchase Agreement	**122,000**	**145,500**
Business Enterprise Value	**410,500**	**443,500**

We appreciate the opportunity to perform this engagement and be of service to Townsite. If you have any questions, please feel free to contact Gaither Weeks at (980) 938-3606 or gweeks@kpmg.com, Rocco DiBruno at (267) 256-1791 or rdibruno@kpmg.com, or Kelsey Forbes at (443) 545-4510 or kelseyforbes@kpmg.com.

Very truly yours,

KPMG LLP

Summary Memorandum

Valuation Methodology

In determining the FMV of the Subject Assets, KPMG considered the three basic valuation methods: Income approach, Cost approach, and Market approach. For the PP&E, KPMG relied upon the Discounted Cash Flow ("DCF") method under the Income approach as well as the Replacement Cost New ("RCN") method under the Cost approach. Given the limited market transaction data available as of the Valuation Date, KPMG did not develop the Market approach. In determining the FMV of the PPAs, KPMG used the Differential Cash Flow method under the Income approach.

Property, Plant, and Equipment ("PP&E")

Income Approach

KPMG used the DCF method under the Income approach as one method of valuing the PP&E. The DCF method is based on the present value of i) the projected cash flows, and ii) a terminal value. The sum of the present value of the cash flows from the discrete period and the present value of the terminal value represents the FMV of the operations of the PP&E. Because the PP&E is a finite-lived asset, a terminal value was not included in our analysis as we determined there was no net salvage value to the equipment at the end of the useful life. The PP&E is expected to have a 35-year useful life in total, with 33.4 years remaining as of the Valuation Date.

In order to bifurcate the FMV of the PP&E from the PPAs, KPMG developed a DCF using market pricing. Given the complexity of the PPA structure of the Project, there was limited market data available for comparable pricing as of the Valuation Date, therefore KPMG assumed that if the PPAs were not owned by the Project as of the Valuation Date, it would operate on a fully merchant scenario. KPMG relied on the blended Woodmackenzie and ABB curves provided by Management, given Woodmackenzie and ABB are reputable providers within the industry. KPMG used the operating expenses provided by Management, excluding the property tax expense, given the analysis is performed for property tax assessment purposes. KPMG estimated tax depreciation based on the FMV of the PP&E under the assumption that under a hypothetical transaction, a willing buyer would acquire the PP&E in a taxable transaction to yield the benefit of the tax benefit from the stepped-up depreciation. KPMG then tax affected the earnings before interest and taxes to arrive at net operating profit after tax and adjusted for changes in working capital and added back tax depreciation to develop the debt-free cash flows to investors.

The cash flows were discounted back to present value using a loaded Weighted Average Cost of Capital ("WACC") to reflect the required return by all providers of capital. The unloaded WACC is calculated by weighting the after-tax returns on equity and debt. We ultimately concluded on a rounded unloaded WACC of 9.75 percent. Given the analysis was performed in order to assess the FMV of the PP&E to determine the property taxes, the WACC then had to be loaded with the applicable property tax rate of 2.6 percent. KPMG concluded on a rounded loaded WACC of 12.25 percent and developed a range by sensitizing +/- 50 basis points.

As previously noted, the PP&E was placed in service on November 30, 2021, at which time an investment tax credit ("ITC") was claimed based on the FMV of the PP&E at that date. The ITC is subject to a 5-year recapture period by which, if the property is sold, damaged, or ceased to be in use, the party that claimed the tax credit is liable to repay a portion of the claimed credit. Given the Valuation Date is still within the recapture period for the PP&E, a willing seller would consider the remaining balance of the recapture liability if the PP&E were to be sold, therefore KPMG adjusted the sum of the discounted cash flows for the balance of the recapture liability as of the Valuation Date in order to determine the FMV of the PP&E.

After discounting the free cash flows to present value and adding the recapture liability, we determined a FMV of $288.5 million to $298.0 million under the income approach for the Project's PP&E.

Cost Approach

The FMV estimation under the cost approach is based on current cost new of the subject asset less the depreciation attributable to physical, functional, and economic factors.

Our PP&E valuation process involved:

- Reviewing the nature and use of the PP&E
- Collecting physical descriptions of major assets from documents provided by the client
- Analyzing and developing a RCN estimate for the PP&E based on data from industry publications and internal KPMG data for similar project types
- Appraise the PP&E in its current condition by applying depreciation and obsolescence
- Allocating the FMV to individual components

KPMG estimated the replacement cost new based on the Department of Energy ("DOE") and Energy Information Administration ("EIA") capital cost estimates for solar PV with single axis tracking + AC couple battery storage projects. This cost represents an "overnight" cost in 2023 dollars to construct a similar project. This report was published in 2024. We collaborated this replacement cost estimate with data from the National Renewable Energy Laboratories ("NREL") and similar projects that KPMG has valued in the past. We also adjusted our replacement cost estimate to account for capitalized interest or cost of financing the construction of the project.

After determining the replacement cost new, KPMG estimated the physical depreciation of the asset since it was placed online as well as any obsolescence. We considered physical deterioration, functional obsolescence, and economic obsolescence.

Physical deterioration was estimated based on S2 Iowa curves with a 0.75 service factor and economic lives ranging from 10 to 35 years depending on the component of the PP&E. Functional obsolescence was not identified given the PP&E is less than two years old as of the Valuation Date and does not have any known design flaws. Economic obsolescence was quantified and applied to the PP&E to account for economic conditions external to the asset which reduces the FMV in excess of all identifiable physical depreciation and functional obsolescence. The economic obsolescence was quantified through a DCF analysis. The FMV of the PP&E is the RCN less the physical deterioration less the obsolescence penalty quantified by the income approach, therefore we concluded on a FMV of PP&E of $288.5 million to $298.0 million under the cost approach.

Conclusion

Given the Income approach indicates economic obsolescence, we weighted the Income approach at 100.0 percent. Therefore, our concluded value of PP&E for the Project is $288.5 million to $298.0 million as of the Valuation Date.

Power Purchase Agreements ("PPA")

The PPAs represent the executed Power Purchase agreements that the Project held in place as of the Valuation Date. KPMG estimated the value of the PPAs to determine if an out-of-market contract intangible existed as of the Valuation Date.

Given the unique structure of the PPAs, KPMG used the Differential Cash Flow method under the Income approach in order to estimate the FMV of the PPAs. The premise of the Differential Cash Flow method assumes that if the existing contracts were not in place as of the Valuation Date, the Project would operate on a merchant basis. The difference between the contracted cash flows and the merchant cash flows is then discounted back to present value, based on the appropriate required rate of return for the respective cash flow.

Consistent with the PP&E valuation, KPMG relied on the merchant forecast provided by Management in developing the merchant scenario estimates for the Differential Cash Flow method. KPMG discounted the merchant cash flows at the 9.75 percent unloaded WACC noted above and sensitized this +/- 50 basis points to develop a range.

KPMG discounted the contracted cash flows based on the merchant unloaded WACC, excluding any CSRP related to merchant exposure, which resulted in a midpoint of 8.0 percent, and we further sensitized the WACC by +/- 50 basis points to develop a range.

After discounting the respective cash flows streams at their respective discount rates, KPMG determined the differential between the sum of the two cash flows. Given a favorable contract is an amortizable asset in the U.S., KPMG then applied a tax amortization benefit to arrive at the concluded PPA value range of $122.0 million to $145.5 million.

Business Enterprise Value ("BEV")

Based on the sum of the FMV of the Subject Assets, KPMG indicated a total BEV for the Project between $410.5 million to $443.5 million. To corroborate the conclusions, KPMG used the projected financial information for the Project to develop the internal rate of return ("IRR") implied by the conclusions. KPMG used the property tax estimate based on the midpoint of the PP&E conclusions and developed an IRR of 10.1 percent. We note the implied rate of return falls within the range of the concluded discount rates and reconciles closely to the implied weighted return on the Subject Assets.

Conclusion

Based on the analysis discussed in this summary and presented in the accompanying schedules, it is our opinion that the range of FMV of the Subject Assets as of the Valuation Date are as follows:

Concluded Range of FMV of the Subject Assets (USD thousands)

Summary of Values	Low	High
PP&E	**288,500**	**298,000**
Off-Take Agreement	**122,000**	**145,500**
Business Enterprise Value	**410,500**	**443,500**

Appendix A – Appraisal certification

KPMG

Business valuation

We hereby, to our best knowledge and belief, certify the following statements regarding this opinion:

1. The statements of fact contained in this Appraisal Report are true and correct. We have no obligation to update the report or value opinions for information that comes to our attention after the date of this report.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, unbiased professional analyses, opinions, and conclusions. Our conclusions are limited to the intended users outlined in the valuation report.
3. We have no present or prospective interest in the properties that are the subject of this report, and we have no personal interest with respect to the parties involved.
4. We have performed other services, as an appraiser or in any other capacity, regarding the assets that are the subject of this report within the three-year period immediately preceding acceptance of this assignment. We performed appraisal and cost segregation studies for the Subject Assets, which were finalized December 17, 2021.
5. We have no bias with respect to the properties that are the subject of this report or to the parties involved with this assignment.
6. Our compensation for completing this engagement is fee based and not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the Client or the Company, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
7. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the American Institute of Certified Public Accountants' Statement on Standards for Valuation Services and the Uniform Standards of Professional Appraisal Practice.
8. We are subject to the code of professional ethics and standards of professional conduct and are in compliance with the certification programs of the professional appraisal organizations of which we are members.
9. The economic and industry data considered in this valuation have been obtained from various printed or electronic reference sources that we believe to be reliable. We have not performed any corroborating procedures to substantiate that data.
10. We have not utilized the work of third-party specialists within this valuation assignment.
11. The persons listed below provided significant professional assistance to the person(s) signing this certification.

Gaither Weeks

Gaither Weeks, CPA / ABV, CFA
Managing Director

Kelsey Forbes

Kelsey Forbes, ABV
Manager

Assisted by: Devika Marwah, Associate Consultant

Property, Plant, and Equipment – Cost Approach

We hereby, to our best knowledge and belief, certify the following statements regarding this opinion:

1. The statements of fact contained in this Appraisal Report are true and correct. We have no obligation to update the report or value opinions for information that comes to our attention after the date of this report.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, unbiased professional analyses, opinions, and conclusions. Our conclusions are limited to the intended users outlined in the valuation report.
3. We have no present or prospective interest in the properties that are the subject of this report, and we have no personal interest with respect to the parties involved.
4. We have performed other services, as an appraiser or in any other capacity, regarding the assets that are the subject of this report within the three-year period immediately preceding acceptance of this assignment. We performed appraisal and cost segregation studies for the Subject Assets, which were finalized December 17, 2021.
5. We have no bias with respect to the properties that are the subject of this report or to the parties involved with this assignment.
6. Our compensation for completing this engagement is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the Client or the Company, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
7. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
8. The report analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute and the American Institute of Certified Public Accountants' Statement on Standards for Valuation Services.
9. The signers of this report have not made a personal inspection of the property that is the subject of this report.
10. We are subject to the code of professional ethics and standards of professional conduct and are in compliance with the certification programs of the professional appraisal organizations of which we are members.
11. The economic and industry data considered in this valuation have been obtained from various printed or electronic reference sources that we believe to be reliable. We have not performed any corroborating procedures to substantiate that data.
12. We have not utilized the work of third-party specialists within this valuation assignment.
13. The persons listed below provided significant professional assistance to the person(s) signing this certification.
14. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

KPMG

R. DiBruno

Rocco DiBruno
Managing Director

Vincent Perozze

Vincent R Perozze
Manager

Assisted by: Hank Cassidy, Managing Director, Concurring Review Partner

Appendix B – Valuation considerations

Elements of ownership control

This valuation is performed on the basis of 100.0 percent ownership of the Project.

Elements of marketability

This analysis assumes that the Subject Assets are on a marketable basis.

Extraordinary assumptions

USPAP defines an extraordinary assumption as:

An assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser's opinions or conclusions.

Our valuation analysis did not make use of any extraordinary assumptions as of the Valuation Date.

Hypothetical Conditions

USPAP defines a hypothetical condition as:

A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results but is used for the purpose of analysis.

Our valuation analysis did not make use of any hypothetical conditions.

Appendix C – Valuation services limiting assumptions

1. Nature of Opinion. Neither our opinion nor our report are to be construed as a fairness opinion as to the fairness of an actual or proposed transaction, a solvency opinion, or an investment recommendation, but, instead, are the expression of our determination of the fair market value of the Subject Assets between a hypothetical willing buyer and a hypothetical willing seller in an assumed transaction on an assumed valuation date. For various reasons, the price at which the Subject Assets might be sold in a specific transaction between specific parties on a specific date might be significantly different from the fair market value expressed in our report.

2. Going Concern Assumption, No Undisclosed Contingencies. Our analysis (i) assumes that as of the Valuation Date the Company and its assets will continue to operate as configured as a going concern; (ii) is based on the past and present financial condition of the Company and its assets as of the Valuation Date; and (iii) assumes that the Company had no undisclosed real or contingent assets or liabilities, no unusual obligations or substantial commitments, other than in the ordinary course of business, nor had any litigation pending or threatened that would have a material effect on our analysis.

3. Reliance on Forecasted Data. Any use of management's projections or forecasts in our analysis does not constitute an examination or compilation of prospective financial statements in accordance with standards established by the American Institute of Certified Public Accountants (AICPA). We do not express an opinion or any other form of assurance on the reasonableness of the underlying assumptions or whether any of the prospective financial statements, if used, are presented in conformity with AICPA presentation guidelines. Further, there will usually be differences between prospective and actual results because events and circumstances frequently do not occur as expected and those differences may be material.

4. Verification of Legal Description or Title. We have made no investigation of legal description or title and have assumed that owner(s) claims to property are valid. No consideration will be given to liens or encumbrances which may be against the property except as specifically stated as part of the financial statements you provide to us as part of this engagement. Full compliance with all applicable federal, state and local zoning, environmental, and similar laws and regulations is assumed, unless otherwise stated, and responsible ownership and competent management are assumed.

5. Verification of Hazardous Conditions. We will not investigate the extent of any hazardous substances that may exist as we are not qualified to test for such substances or conditions. If the presence of such substances, such as asbestos, urea formaldehyde foam insulation or other hazardous substances or environmental conditions may affect the value of the property, the value will be estimated predicated on the assumption that there is no such condition on or in the property or in such proximity thereto that it would cause a loss in value. No responsibility will be assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.

6. Condition of Property. We assume no liability whatsoever with respect to the condition of the subject property for hidden or unapparent conditions, if any, of the subject property, subsoil or structures, and further assume no liability or responsibility whatsoever with respect to the correction of any defects which may now exist or which may develop in the future. Equipment components considered, if any, were assumed to be adequate for the needs of the property's improvements, and in good working condition, unless otherwise reported.

7. Zoning. It is assumed that all public and private zoning and use restrictions and regulations had been complied with, unless nonconformity was stated, defined and considered in the report.

8. The Americans with Disabilities Act (ADA). The ADA became effective January 26, 1992. We will not make a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more requirements of the ADA. If so, this fact could have a negative effect upon the value of the property. Since we have no direct evidence relating to this issue, we will not consider possible non-compliance with the requirements of the ADA in estimating the value of the property.

Appendix D – Valuation schedules

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes

As of July 1, 2023

Townsite Solar, LLC
Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes
Glossary
As of July 1, 2023

Term	Definition
BEV	Business Enterprise Value (Total Equity + Net Debt)
CAPEX	Capital Expenditures
CYE	Calendar Year End
D&A	Depreciation and Amortization Expenses
DCF	Discounted Cash Flow
EBIT	Earnings Before Interest and Taxes
EBITA	Earnings Before Interest, Taxes, and Amortization
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EBITDAR	Earnings Before Interest, Taxes, Depreciation, Amortization, and Rent Expenses
FYE	Fiscal Year End
LCY	Last Calendar Year
LFY	Last Fiscal Year
NCY	Next Calendar Year
NFY	Next Fiscal Year
NOL	Net Operating Loss Carryforwards
NWC	Net Working Capital
OLL	Operating Lease Liabilities
OPEX	Operating Expenses
ROU	Right-of-Use
TAB	Tax Amortization Benefit
TIC	Total Invested Capital (Total Equity + Total Debt)
TTM	Trailing Twelve Months
WACC	Weighted Average Cost of Capital

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes
Table of Contents
As of July 1, 2023

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 1**
Summary of Values — **Page 1 of 1**
As of July 1, 2023 — *(USD in thousands)*

Project Summary [1]	Townsite Solar, LLC
Attributes	
Commercial Operations Date	11/30/2021
Remaining Useful Life	33.4
Technology	Solar Photovoltaic
Racking Type	Tracking
Location	
State	Nevada
County	Boulder City
Market	Mead
Size	
Solar Nameplate Capacity (MW AC)	195.3
Solar Nameplate Capacity (MW DC)	232.4
Storage Nameplate Capacity (MW AC)	90.0
Average Capacity Factor (AC)	27.6%
Average Capacity Factor (DC)	23.2%
Full-Life Average EBITDA Margin (%)	54.9%
10-Year Average EBITDA Margin (%)	56.7%
Off-Take Agreements	
Agreement	Power Purchase Agreement
Counter Party	Glendale Water & Power
Remaining Term	18.4 years
Agreement	Power Purchase Agreement
Counter Party	VEA
Remaining Term	18.4 years
Agreement	Power Purchase Agreement
Counter Party	Boulder City
Remaining Term	28.4 years

	Summary of Values (Rounded)		Townsite	
	PP&E	**Low**	**Midpoint**	**High**
[2]	Income Approach	288,500	293,000	298,000
[3]	*Weight %*	*100.0%*	*100.0%*	*100.0%*
[2]	Cost Approach	288,500	293,000	298,000
[3]	*Weight %*	*0.0%*	*0.0%*	*0.0%*
	Fair Market Value of PP&E	**288,500**	**293,000**	**298,000**
[4]	**Contract Valuation**	**Low**	**Midpoint**	**High**
[2]	Differential Method	122,000	133,500	145,500
	Weight %	*100.0%*	*100.0%*	*100.0%*
	Fair Market Value of Contract Valuation	**122,000**	**133,500**	**145,500**
	Total Townsite Solar, LLC	**Low**	**Midpoint**	**High**
	Business Enterprise Value	**410,500**	**426,500**	**443,500**
	$/WAC	*1.44*	*1.49*	*1.55*
	Discount Rate	**Low**	**Midpoint**	**High**
[5]	Implied Rate of Return		10.1%	
	Weighted Average Cost of Capital - Merchant - Loaded	12.75%	12.25%	11.75%
	Weighted Average Cost of Capital - Contracted	8.50%	8.00%	7.50%
	Weighted Average Cost of Capital - Merchant	10.25%	9.75%	9.25%

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management. Based on Townsite 2023_Q2'23_Updated Merchant - AJF edits.xlsx.
[2] As estimated by KPMG.
[3] Given the income approach indicated economic obsolescence, we weighted the income approach 100%.
[4] Contracts refer to the REC and Power contracts with Glendale and VEA respectively, that are held by Townsite Solar, LLC.
[5] Represents the implied rate of return to reconcile the projected financial information with the total FMV of the Subject Assets using the midpoint estimate for propety taxes based on the PP&E conclusion.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 2**
Balance Sheet — **Page 1 of 1**
As of July 1, 2023 — *(USD in thousands)*

		Historical		
		CYE [1]		As Of [1]
		12/31/21	12/31/22	12/31/23
	Cash and Cash Equivalents	274	6,396	5,011
	Accounts Receivable	29,342	9,567	6,889
	Inventory	-	-	223
	Prepaid Expenses	3,929	3,550	3,386
	Current Assets	**33,546**	**19,513**	**15,509.6**
[2]	Property, Plant, and Equipment	530,733	510,408	491,950
	ARO Asset	4,531	3,524	3,318
	Noncurrent Assets	**535,264**	**513,932**	**495,268**
	Total Assets	**568,810**	**533,445**	**510,777**
	Accounts Payable	4,527	3,575	2,193
	Intercompany Payables	(8,248)	-	(242)
	Other Current Liabilities	14,962	-	-
	Accrued Expenses	-	6,096	7,659
	Current Liabilities	**11,242**	**10,273**	**10,235**
	Operating Lease Liabilities, Noncurrent	(567)	47,088	(4,410)
	ARO Liability	4,561	3,834	4,136
	Noncurrent Liabilities	**3,994**	**50,922**	**(274)**
	Total Liabilities	**15,236**	**61,195**	**9,961**
	Other Equity	553,574	472,250	500,816
	Total Equity	**553,574**	**472,250**	**500,816**
	Total Liabilities and Equity	**568,810**	**533,445**	**510,777**

	Summary of Key Metrics - Book Values			
	Cash and Cash Equivalents	274	6,396	5,011
[3]	Total Debt (Exc. Finance Lease Liab. and Operating Lease Liab.)	-	-	-
[3]	Total Debt (Inc. Finance Lease Liabilities and Operating Lease Liabilities)	(567)	47,690	(3,784)
	Noncurrent Operating Assets, Net	(30)	(310)	(818)
	Book Value of Net Working Capital (Accrual Basis)	22,304	9,842	5,900
[4]	Book Value of Cash Free Net Working Capital	22,030	3,446.4	889.3

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management. December 31, 2023 balance sheet used as a proxy for the balance sheet as of the Valuation Date.
[2] Excludes the right-of-use asset (ROU) associated with operating and finance leases.
[3] Represents the sum of all interest bearing liabilities.
[4] Represents current assets minus cash and current liabilities, excluding debt, finance leases, operating leases, nonoperating assets, or nonoperating liabilities.

Business Enterprise Value

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes **Schedule 3**
Business Enterprise Value - Income Approach **Page 1 of 3**
As of July 1, 2023 *(USD in thousands)*

	Projected											
	Stub [1]	CYE [1]										
	12/31/23	12/31/24	12/31/25	12/31/26	12/31/27	12/31/28	12/31/29	12/31/30	12/31/31	12/31/32	12/31/33	12/31/34
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Battery Capacity (MW AC)	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total Production (MWh)	**245,660**	**510,933**	**509,159**	**507,347**	**505,497**	**503,609**	**501,693**	**499,749**	**497,779**	**495,782**	**493,784**	**491,791**
Growth/(Degradation) %	*n/a*	*n/a*	*-0.3%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*
PPA Production (MWh)	297,369	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146
PPA Price ($/MWh)	68.83	61.64	62.07	64.66	66.05	67.36	68.63	70.09	71.53	72.75	73.99	75.26
PPA Revenue	20,469	33,787	34,022	35,445	36,205	36,921	37,617	38,422	39,207	39,877	40,559	41,253
PPA Revenue Growth %	*n/a*	*n/a*	*0.7%*	*4.2%*	*2.1%*	*2.0%*	*1.9%*	*2.1%*	*2.0%*	*1.7%*	*1.7%*	*1.7%*
Contracted REC Production (MWh)	120,611	277,307	275,533	273,721	271,871	269,982	268,067	266,123	264,153	-	-	-
Contracted REC Price ($/MWh)	23.92	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	n/a	n/a	n/a
Contracted REC Revenue	2,885	3,605	3,582	3,558	3,534	3,510	3,485	3,460	3,434	-	-	-
Contracted REC Revenue Growth %	*n/a*	*n/a*	*-0.6%*	*-0.7%*	*-0.7%*	*-0.7%*	*-0.7%*	*-0.7%*	*-0.7%*	*-100.0%*	*n/a*	*n/a*
Merchant Storage Capacity (MW)	90	90	90	90	90	90	90	90	90	90	90	90
Merchant Storage Price ($/kW-month)	1.16	4.00	4.00	4.25	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Merchant Storage Revenue	1,250	4,320	4,320	4,590	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560
Merchant Storage Revenue Growth %	*n/a*	*n/a*	*0.0%*	*6.3%*	*64.7%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Merchant Power Production (MWh)	(51,709)	(37,213)	(38,987)	(40,799)	(42,649)	(44,538)	(46,453)	(48,397)	(50,367)	(52,364)	(54,363)	(56,355)
Merchant Power Revenue	(13,254)	(14,988)	(9,495)	(4,225)	(4,502)	(4,789)	(5,082)	(5,380)	(5,654)	(5,930)	(6,209)	(6,491)
Merchant Power Revenue Growth %	*n/a*	*n/a*	*-36.7%*	*-55.5%*	*6.6%*	*6.4%*	*6.1%*	*5.9%*	*5.1%*	*4.9%*	*4.7%*	*4.5%*
Merchant REC Production (MWh)	-	-	-	-	-	-	-	-	-	262,156	260,157	258,165
Merchant REC Price ($/MWh)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.88	8.80	8.45
Merchant REC Revenue	-	-	-	-	-	-	-	-	-	1,802	2,290	2,182
Merchant REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*27.1%*	*-4.7%*
Total Revenue	**11,349**	**26,724**	**32,429**	**39,368**	**42,797**	**43,201**	**43,580**	**44,062**	**44,547**	**43,309**	**44,200**	**44,505**
Total Revenue Growth %	*n/a*	*n/a*	*21.3%*	*21.4%*	*8.7%*	*0.9%*	*0.9%*	*1.1%*	*1.1%*	*-2.8%*	*2.1%*	*0.7%*
Fixed Scope O&M	385	785	801	824	905	923	941	960	1,002	1,277	1,302	1,328
O&M Contingency (Out of Scope)	130	266	271	277	282	288	294	299	305	312	318	324
BESS O&M	728	1,492	1,530	1,568	1,607	1,647	1,689	1,731	1,774	1,818	1,864	1,910
Spare Parts	135	271	271	271	271	271	271	271	271	271	271	271
LC fees	290	580	580	580	580	580	580	580	580	580	580	580
Property Tax	-	1,472	1,369	1,281	1,192	1,119	1,045	971	913	854	795	736
Land Lease	951	1,569	1,581	1,593	1,605	1,617	1,629	1,641	1,654	1,666	1,679	1,691
Insurance Expense (Projects)	292	584	584	584	584	584	584	584	584	584	584	584
Audit & Tax Expense (Projects)	942	1,931	1,980	2,029	2,080	2,132	2,185	2,240	2,296	2,353	2,412	2,472
Other Operating Expenses	178	1,365	1,356	1,520	1,204	1,136	663	670	676	682	689	695
Total Operating Expenses	**4,033**	**10,317**	**10,323**	**10,527**	**10,311**	**10,297**	**9,882**	**9,948**	**10,055**	**10,397**	**10,494**	**10,593**
EBITDA	**7,317**	**16,407**	**22,106**	**28,842**	**32,486**	**32,905**	**33,698**	**34,114**	**34,492**	**32,911**	**33,706**	**33,912**
EBITDA %	*64.5%*	*61.4%*	*68.2%*	*73.3%*	*75.9%*	*76.2%*	*77.3%*	*77.4%*	*77.4%*	*76.0%*	*76.3%*	*76.2%*
[2] Depreciation & Amortization Expenses	51,615	83,240	51,196	31,856	31,543	17,025	2,652	2,639	2,630	2,626	2,630	2,626
Depreciation & Amortization Expenses %	*454.8%*	*311.5%*	*157.9%*	*80.9%*	*73.7%*	*39.4%*	*6.1%*	*6.0%*	*5.9%*	*6.1%*	*5.9%*	*5.9%*
EBIT	**(44,299)**	**(66,834)**	**(29,090)**	**(3,015)**	**943**	**15,880**	**31,046**	**31,475**	**31,862**	**30,285**	**31,076**	**31,286**
EBIT %	*(390.3%)*	*(250.1%)*	*(89.7%)*	*(7.7%)*	*2.2%*	*36.8%*	*71.2%*	*71.4%*	*71.5%*	*69.9%*	*70.3%*	*70.3%*
Income Taxes	(9,303)	(14,035)	(6,109)	(633)	198	3,335	6,520	6,610	6,691	6,360	6,526	6,570
[3] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net Operating Profit After Tax	**(34,996)**	**(52,799)**	**(22,981)**	**(2,382)**	**745**	**12,545**	**24,526**	**24,865**	**25,171**	**23,926**	**24,550**	**24,716**
[2] Plus: Depreciation & Amortization Expenses	51,615	83,240	51,196	31,856	31,543	17,025	2,652	2,639	2,630	2,626	2,630	2,626
Plus: Depreciation & Amortization Expenses %	*454.8%*	*311.5%*	*157.9%*	*80.9%*	*73.7%*	*39.4%*	*6.1%*	*6.0%*	*5.9%*	*6.1%*	*5.9%*	*5.9%*
[4] (Increase) / Decrease in Net Working Capital	5,299	(743)	(472)	(554)	(300)	(27)	(73)	(34)	(31)	137	(73)	(17)
Free Cash Flow	**21,918**	**29,698**	**27,743**	**28,921**	**31,988**	**29,543**	**27,106**	**27,470**	**27,770**	**26,689**	**27,107**	**27,325**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[5] Present Value Period	0.2507	1.0014	2.0014	3.0014	4.0014	5.0014	6.0014	7.0014	8.0014	9.0014	10.0014	11.0014
Present Value Factor @ 10.1% Discount Rate	0.9763	0.9085	0.8254	0.7500	0.6815	0.6192	0.5626	0.5112	0.4644	0.4220	0.3834	0.3484
Discounted Cash Flow	**21,398**	**26,980**	**22,900**	**21,691**	**21,799**	**18,292**	**15,249**	**14,041**	**12,897**	**11,262**	**10,393**	**9,519**
Sum of Discounted Cash Flows	**263,419**											
[6] Investment Tax Credit Recapture Liability	144,082											
Tax Amortization Benefit	18,999											
Business Enterprise Value	**426,500**											

Key Assumptions	
Selected Tax Rate	21.0%
Implied Rate of Return	10.1%

Notes:
[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Depreciation expenses and amortization expenses projections were estimated by KPMG. Refer to Schedule 4 for more details.
[3] Based on the blended federal and Nevada state corporate income tax rate.
[4] Estimated working capital requirement based on 30 days of revenue and 30 days of expenses.
[5] Assumed mid-period cash flow receipts.
[6] Investment Tax Credit (ITC) recapture liability refers to the repayment of tax benefits that a taxpayer previously claimed through the ITC if the qualifying property is disposed of or otherwise ceases to meet the eligibility criertia for the credit.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes
Business Enterprise Value - Income Approach
As of July 1, 2023

Schedule 3
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(USD in thousands)

	Projected											
	CYE [1]											
	12/31/35	12/31/36	12/31/37	12/31/38	12/31/39	12/31/40	12/31/41	12/31/42	12/31/43	12/31/44	12/31/45	12/31/46
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Battery Capacity (MW AC)	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total Production (MWh)	**489,807**	**487,826**	**485,857**	**483,897**	**481,944**	**479,994**	**478,056**	**476,127**	**474,205**	**472,286**	**470,380**	**468,481**
Growth/(Degradation) %	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*
PPA Production (MWh)	548,146	548,146	548,146	548,146	548,146	528,781	252,387	23,316	23,316	23,316	23,316	23,316
PPA Price ($/MWh)	76.55	79.26	80.62	82.00	83.40	83.18	37.66	7.69	6.67	5.62	4.55	3.46
PPA Revenue	41,960	43,445	44,189	44,947	45,717	43,983	9,506	179	155	131	106	81
PPA Revenue Growth %	*1.7%*	*3.5%*	*1.7%*	*1.7%*	*1.7%*	*-3.8%*	*-78.4%*	*-98.1%*	*-13.4%*	*-15.7%*	*-19.0%*	*-24.0%*
Contracted REC Production (MWh)	-	-	-	-	-	-	-	-	-	-	-	-
Contracted REC Price ($/MWh)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Contracted REC Revenue	-	-	-	-	-	-	-	-	-	-	-	-
Contracted REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Storage Capacity (MW)	90	90	90	90	90	90	90	-	-	-	-	-
Merchant Storage Price ($/kW-month)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	n/a	n/a	n/a	n/a	n/a
Merchant Storage Revenue	7,560	7,560	7,560	7,560	7,560	7,560	7,560	-	-	-	-	-
Merchant Storage Revenue Growth %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*nmf*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Power Production (MWh)	(58,339)	(60,320)	(62,289)	(64,250)	(66,202)	(48,787)	225,669	452,811	450,890	448,971	447,064	445,165
Merchant Power Revenue	(6,773)	(7,173)	(7,575)	(7,980)	(8,388)	(7,185)	7,239	18,039	18,721	18,966	19,870	20,364
Merchant Power Revenue Growth %	*4.4%*	*5.9%*	*5.6%*	*5.3%*	*5.1%*	*-14.3%*	*-200.8%*	*149.2%*	*3.8%*	*1.3%*	*4.8%*	*2.5%*
Merchant REC Production (MWh)	256,181	254,200	252,231	250,270	248,318	260,773	467,189	475,131	473,210	471,291	469,384	467,485
Merchant REC Price ($/MWh)	7.20	7.01	6.14	6.27	5.69	5.81	5.19	5.30	5.40	5.51	5.62	4.93
Merchant REC Revenue	1,844	1,783	1,550	1,568	1,413	1,514	2,426	2,517	2,557	2,597	2,639	2,305
Merchant REC Revenue Growth %	*-15.5%*	*-3.3%*	*-13.1%*	*1.2%*	*-9.9%*	*7.1%*	*60.3%*	*3.7%*	*1.6%*	*1.6%*	*1.6%*	*-12.7%*
Total Revenue	**44,591**	**45,615**	**45,724**	**46,095**	**46,303**	**45,872**	**26,732**	**20,735**	**21,434**	**21,694**	**22,614**	**22,749**
Total Revenue Growth %	*0.2%*	*2.3%*	*0.2%*	*0.8%*	*0.5%*	*-0.9%*	*-41.7%*	*-22.4%*	*3.4%*	*1.2%*	*4.2%*	*0.6%*
Fixed Scope O&M	1,355	1,382	1,410	1,438	1,467	1,496	1,526	1,556	1,587	1,619	1,652	1,685
O&M Contingency (Out of Scope)	331	337	344	351	358	365	372	380	387	395	403	411
BESS O&M	1,958	2,007	2,057	2,109	2,161	2,216	2,271	2,328	2,386	2,446	2,507	2,569
Spare Parts	271	271	271	271	271	271	271	271	271	271	271	271
LC fees	580	580	580	580	580	580	580	580	580	580	580	580
Property Tax	692	648	603	559	530	486	456	427	397	368	339	280
Land Lease	1,704	1,717	1,730	1,743	1,756	1,769	1,782	1,795	1,809	1,822	1,836	1,850
Insurance Expense (Projects)	584	584	584	584	584	584	584	584	584	584	584	584
Audit & Tax Expense (Projects)	2,534	2,598	2,663	2,729	2,797	2,867	2,939	3,012	3,088	3,165	3,244	3,325
Other Operating Expenses	702	709	716	723	731	724	533	373	373	374	374	374
Total Operating Expenses	**10,711**	**10,833**	**10,958**	**11,087**	**11,235**	**11,357**	**11,315**	**11,307**	**11,464**	**11,624**	**11,790**	**11,930**
EBITDA	**33,880**	**34,782**	**34,766**	**35,008**	**35,068**	**34,515**	**15,417**	**9,428**	**9,970**	**10,070**	**10,825**	**10,819**
EBITDA %	*76.0%*	*76.3%*	*76.0%*	*75.9%*	*75.7%*	*75.2%*	*57.7%*	*45.5%*	*46.5%*	*46.4%*	*47.9%*	*47.6%*
[2] Depreciation & Amortization Expenses	2,630	2,626	2,630	1,465	305	305	305	305	152	-	-	-
Depreciation & Amortization Expenses %	*5.9%*	*5.8%*	*5.8%*	*3.2%*	*0.7%*	*0.7%*	*1.1%*	*1.5%*	*0.7%*	*0.0%*	*0.0%*	*0.0%*
EBIT	**31,250**	**32,157**	**32,136**	**33,543**	**34,763**	**34,210**	**15,112**	**9,123**	**9,818**	**10,070**	**10,825**	**10,819**
EBIT %	*70.1%*	*70.5%*	*70.3%*	*72.8%*	*75.1%*	*74.6%*	*56.5%*	*44.0%*	*45.8%*	*46.4%*	*47.9%*	*47.6%*
Income Taxes	6,563	6,753	6,749	7,044	7,300	7,184	3,174	1,916	2,062	2,115	2,273	2,272
[3] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net Operating Profit After Tax	**24,688**	**25,404**	**25,388**	**26,499**	**27,463**	**27,026**	**11,939**	**7,207**	**7,756**	**7,955**	**8,552**	**8,547**
[2] Plus: Depreciation & Amortization Expenses	2,630	2,626	2,630	1,465	305	305	305	305	152	-	-	-
Plus: Depreciation & Amortization Expenses %	*5.9%*	*5.8%*	*5.8%*	*3.2%*	*0.7%*	*0.7%*	*1.1%*	*1.5%*	*0.7%*	*0.0%*	*0.0%*	*0.0%*
[4] (Increase) / Decrease in Net Working Capital	3	(66)	(6)	(20)	(5)	53	1,562	492	(45)	(6)	(64)	0
Free Cash Flow	**27,320**	**27,963**	**28,011**	**27,944**	**27,763**	**27,384**	**13,805**	**8,005**	**7,864**	**7,949**	**8,487**	**8,548**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[5] Present Value Period	12.0014	13.0014	14.0014	15.0014	16.0014	17.0014	18.0014	19.0014	20.0014	21.0014	22.0014	23.0014
Present Value Factor @ 10.1% Discount Rate	0.3165	0.2876	0.2613	0.2374	0.2157	0.1960	0.1781	0.1618	0.1470	0.1336	0.1214	0.1103
Discounted Cash Flow	**8,648**	**8,042**	**7,320**	**6,635**	**5,989**	**5,368**	**2,459**	**1,295**	**1,156**	**1,062**	**1,030**	**943**

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Depreciation expenses and amortization expenses projections were estimated by KPMG. Refer to Schedule 4 for more details.
[3] Based on the blended federal and Nevada state corporate income tax rate.
[4] Estimated working capital requirement based on 30 days of revenue and 30 days of expenses.
[5] Assumed mid-period cash flow receipts.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 3**
Business Enterprise Value - Income Approach — **Page 3 of 3**
As of July 1, 2023 — *(USD in thousands)*

	Projected CYE [1]									
	12/31/47	12/31/48	12/31/49	12/31/50	12/31/51	12/31/52	12/31/53	12/31/54	12/31/55	12/31/56
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Battery Capacity (MW AC)	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total Production (MWh)	**466,590**	**464,701**	**462,825**	**460,956**	**459,093**	**456,952**	**454,646**	**452,352**	**450,070**	**427,065**
Growth/(Degradation) %	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.5%*	*-0.5%*	*-0.5%*	*-0.5%*	*-5.1%*
PPA Production (MWh)	23,316	23,316	23,316	23,316	23,316	-	-	-	-	-
PPA Price ($/MWh)	2.35	1.21	0.05	(1.13)	(2.33)	n/a	n/a	n/a	n/a	n/a
PPA Revenue	55	28	1	(26)	(54)	-	-	-	-	-
PPA Revenue Growth %	*-32.2%*	*-48.4%*	*-95.5%*	*-2164.3%*	*106.9%*	*nmf*	*n/a*	*n/a*	*n/a*	*n/a*
Contracted REC Production (MWh)	-	-	-	-	-	-	-	-	-	-
Contracted REC Price ($/MWh)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Contracted REC Revenue	-	-	-	-	-	-	-	-	-	-
Contracted REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Storage Capacity (MW)	-	-	-	-	-	-	-	-	-	-
Merchant Storage Price ($/kW-month)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Merchant Storage Revenue	-	-	-	-	-	-	-	-	-	-
Merchant Storage Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Power Production (MWh)	443,274	441,386	439,509	437,641	435,778	456,952	454,646	452,352	450,070	427,065
Merchant Power Revenue	21,273	21,711	22,158	22,614	23,079	25,081	25,579	26,086	26,603	24,802
Merchant Power Revenue Growth %	*4.5%*	*2.1%*	*2.1%*	*2.1%*	*2.1%*	*8.7%*	*2.0%*	*2.0%*	*2.0%*	*-6.8%*
Merchant REC Production (MWh)	465,594	463,706	461,829	459,961	458,098	456,952	454,646	452,352	450,070	427,065
Merchant REC Price ($/MWh)	5.03	5.15	5.28	5.42	5.55	5.69	5.83	5.98	6.13	6.28
Merchant REC Revenue	2,341	2,390	2,440	2,491	2,543	2,600	2,651	2,704	2,757	2,682
Merchant REC Revenue Growth %	*1.6%*	*2.1%*	*2.1%*	*2.1%*	*2.1%*	*2.2%*	*2.0%*	*2.0%*	*2.0%*	*-2.7%*
Total Revenue	**23,669**	**24,129**	**24,599**	**25,078**	**25,568**	**27,681**	**28,230**	**28,789**	**29,360**	**27,484**
Total Revenue Growth %	*4.0%*	*1.9%*	*1.9%*	*1.9%*	*2.0%*	*8.3%*	*2.0%*	*2.0%*	*2.0%*	*-6.4%*
Fixed Scope O&M	1,718	1,753	1,788	1,823	1,860	1,897	1,935	1,974	2,013	1,879
O&M Contingency (Out of Scope)	419	428	436	445	454	463	472	482	491	459
BESS O&M	2,634	2,699	2,767	2,836	2,907	2,980	3,054	3,130	3,209	3,015
Spare Parts	271	271	271	271	271	271	271	271	271	248
LC fees	580	580	580	580	580	580	580	580	580	532
Property Tax	250	221	191	162	132	103	74	74	74	74
Land Lease	1,864	1,878	1,892	1,906	1,920	1,935	1,949	1,964	1,979	1,493
Insurance Expense (Projects)	584	584	584	584	584	584	584	584	584	536
Audit & Tax Expense (Projects)	3,408	3,494	3,581	3,670	3,762	3,856	3,953	4,051	4,153	3,902
Other Operating Expenses	375	375	376	376	376	356	356	356	356	327
Total Operating Expenses	**12,104**	**12,282**	**12,466**	**12,654**	**12,847**	**13,026**	**13,229**	**13,467**	**13,710**	**12,465**
EBITDA	**11,565**	**11,847**	**12,133**	**12,424**	**12,720**	**14,656**	**15,001**	**15,323**	**15,650**	**15,019**
EBITDA %	*48.9%*	*49.1%*	*49.3%*	*49.5%*	*49.8%*	*52.9%*	*53.1%*	*53.2%*	*53.3%*	*54.6%*
[2] Depreciation & Amortization Expenses	-	-	-	-	-	-	-	-	-	-
Depreciation & Amortization Expenses %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
EBIT	**11,565**	**11,847**	**12,133**	**12,424**	**12,720**	**14,656**	**15,001**	**15,323**	**15,650**	**15,019**
EBIT %	*48.9%*	*49.1%*	*49.3%*	*49.5%*	*49.8%*	*52.9%*	*53.1%*	*53.2%*	*53.3%*	*54.6%*
Income Taxes	2,429	2,488	2,548	2,609	2,671	3,078	3,150	3,218	3,287	3,154
[3] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net Operating Profit After Tax	**9,136**	**9,359**	**9,585**	**9,815**	**10,049**	**11,578**	**11,851**	**12,105**	**12,364**	**11,865**
[2] Plus: Depreciation & Amortization Expenses	-	-	-	-	-	-	-	-	-	-
Plus: Depreciation & Amortization Expenses %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
[4] (Increase) / Decrease in Net Working Capital	(61)	(20)	(26)	(24)	(24)	(156)	(32)	(26)	(27)	1,286
Free Cash Flow	**9,075**	**9,338**	**9,559**	**9,791**	**10,025**	**11,422**	**11,819**	**12,079**	**12,337**	**13,151**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9153
[5] Present Value Period	24.0014	25.0014	26.0014	27.0014	28.0014	29.0014	30.0014	31.0014	32.0014	32.9590
Present Value Factor @ 10.1% Discount Rate	0.1002	0.0910	0.0827	0.0752	0.0683	0.0621	0.0564	0.0512	0.0465	0.0425
Discounted Cash Flow	**909**	**850**	**791**	**736**	**685**	**709**	**666**	**619**	**574**	**511**

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Depreciation expenses and amortization expenses projections were estimated by KPMG. Refer to Schedule 4 for more details.
[3] Based on the blended federal and Nevada state corporate income tax rate.
[4] Estimated working capital requirement based on 30 days of revenue and 30 days of expenses.
[5] Assumed mid-period cash flow receipts.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 4**
Business Enterprise Value - Tax Depreciation — **Page 1 of 1**
As of July 1, 2023 — *(USD in thousands)*

[1] Fair Market Value of PP&E	293,000
Depreciable Basis	**293,000**

Depreciable Basis		
Category	**Allocation % [2]**	**Allocation**
5-year MACRS	84.4%	247,267
7-year MACRS	0.1%	298
15-year MACRS	13.4%	39,335
20-year SLFM	2.1%	6,099
	100.0%	**293,000**

Depreciation & Amortization Schedules [3]	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029	12/31/2030	12/31/2031	12/31/2032	12/31/2033	12/31/2034	12/31/2035
5-year MACRS	20.0%	32.0%	19.2%	11.5%	11.5%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
7-year MACRS	14.3%	24.5%	17.5%	12.5%	8.9%	8.9%	8.9%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%
15-year MACRS	5.0%	9.5%	8.6%	7.7%	6.9%	6.2%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
20-year SLFM	2.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Depreciation & Amortization Schedules [3]	12/31/2036	12/31/2037	12/31/2038	12/31/2039	12/31/2040	12/31/2041	12/31/2042	12/31/2043	12/31/2044	12/31/2045	12/31/2046	12/31/2047	12/31/2048
15-year MACRS	5.9%	5.9%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20-year SLFM	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%

Depreciation & Amortization Expenses	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029	12/31/2030	12/31/2031	12/31/2032	12/31/2033	12/31/2034	12/31/2035
5-year MACRS	49,453	79,126	47,475	28,485	28,485	14,243	-	-	-	-	-	-	-
7-year MACRS	43	73	52	37	27	27	27	13	-	-	-	-	-
15-year MACRS	1,967	3,737	3,363	3,029	2,726	2,451	2,321	2,321	2,325	2,321	2,325	2,321	2,325
20-year SLFM	152	305	305	305	305	305	305	305	305	305	305	305	305
Total Depreciation & Amortization Expenses	**51,615**	**83,240**	**51,196**	**31,856**	**31,543**	**17,025**	**2,652**	**2,639**	**2,630**	**2,626**	**2,630**	**2,626**	**2,630**

Depreciation & Amortization Expenses	12/31/2036	12/31/2037	12/31/2038	12/31/2039	12/31/2040	12/31/2041	12/31/2042	12/31/2043	12/31/2044	12/31/2045	12/31/2046	12/31/2047	12/31/2048
15-year MACRS	2,321	2,325	1,160	-	-	-	-	-	-	-	-	-	-
20-year SLFM	305	305	305	305	305	305	305	152	-	-	-	-	-
Total Depreciation & Amortization Expenses	**2,626**	**2,630**	**1,465**	**305**	**305**	**305**	**305**	**152**	**-**	**-**	**-**	**-**	**-**

Notes:

[1] As estimated by KPMG.
[2] Based on the KPMG Cost Segregation Study.
[3] Calculated using MACRS and Straight-Line Half-Year Convention convention as published in Internal Revenue Service Publication 946.

Property, Plant, and Equipment

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 5**
Property, Plant, and Equipment - Income Approach — **Page 1 of 3**
As of July 1, 2023 — *(USD in thousands)*

	Projected											
	Stub [1]	CYE [1]										
	12/31/23	12/31/24	12/31/25	12/31/26	12/31/27	12/31/28	12/31/29	12/31/30	12/31/31	12/31/32	12/31/33	12/31/34
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Total Production (MWh)	**245,660**	**510,933**	**509,159**	**507,347**	**505,497**	**503,609**	**501,693**	**499,749**	**497,779**	**495,782**	**493,784**	**491,791**
Growth/(Degradation) %	*n/a*	*n/a*	*-0.3%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*
PPA Production (MWh)	297,369	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146
Merchant Price ($/MWh)	42.90	32.44	27.26	26.98	26.87	27.00	27.49	27.43	29.02	29.63	31.15	31.77
Merchant Revenue	12,756	17,783	14,940	14,787	14,728	14,799	15,070	15,037	15,905	16,241	17,075	17,413
Merchant Revenue Growth %	*n/a*	*n/a*	*-16.0%*	*-1.0%*	*-0.4%*	*0.5%*	*1.8%*	*-0.2%*	*5.8%*	*2.1%*	*5.1%*	*2.0%*
Contracted REC Production (MWh)	120,611	277,307	275,533	273,721	271,871	269,982	268,067	266,123	264,153	-	-	-
Merchant REC Price ($/MWh)	12.70	11.67	9.95	10.56	10.65	7.78	7.70	6.71	6.48	6.88	8.80	8.45
Merchant REC Revenue	1,532	3,237	2,743	2,890	2,897	2,099	2,063	1,787	1,713	-	-	-
Merchant REC Revenue Growth %	*n/a*	*n/a*	*-15.3%*	*5.4%*	*0.2%*	*-27.5%*	*-1.7%*	*-13.4%*	*-4.1%*	*nmf*	*n/a*	*n/a*
Merchant Storage Capacity (MW)	90	90	90	90	90	90	90	90	90	90	90	90
Merchant Storage Price ($/kW-month)	1.16	4.00	4.00	4.25	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Merchant Storage Revenue	1,250	4,320	4,320	4,590	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560
Merchant Storage Revenue Growth %	*n/a*	*n/a*	*0.0%*	*6.3%*	*64.7%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Merchant Power Production (MWh)	(51,709)	(37,213)	(38,987)	(40,799)	(42,649)	(44,538)	(46,453)	(48,397)	(50,367)	(52,364)	(54,363)	(56,355)
Merchant Power Price ($/MWh)	42.90	32.44	27.26	26.98	26.87	27.00	27.49	27.43	29.02	29.63	31.15	31.77
Merchant Power Revenue	(2,218)	(1,207)	(1,063)	(1,101)	(1,146)	(1,202)	(1,277)	(1,328)	(1,461)	(1,552)	(1,693)	(1,790)
Merchant Power Revenue Growth %	*n/a*	*n/a*	*-12.0%*	*3.6%*	*4.1%*	*4.9%*	*6.2%*	*4.0%*	*10.1%*	*6.2%*	*9.1%*	*5.7%*
Merchant REC Production (MWh)	-	-	-	-	-	-	-	-	-	262,156	260,157	258,165
Merchant REC Price ($/MWh)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.88	8.80	8.45
Merchant REC Revenue	-	-	-	-	-	-	-	-	-	1,802	2,290	2,182
Merchant REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*27.1%*	*-4.7%*
Total Revenue	**13,320**	**24,132**	**20,940**	**21,167**	**24,038**	**23,256**	**23,416**	**23,056**	**23,716**	**24,052**	**25,232**	**25,365**
Total Revenue Growth %	*n/a*	*n/a*	*-13.2%*	*1.1%*	*13.6%*	*-3.3%*	*0.7%*	*-1.5%*	*2.9%*	*1.4%*	*4.9%*	*0.5%*
Fixed Scope O&M	385	785	801	824	905	923	941	960	1,002	1,277	1,302	1,328
O&M Contingency (Out of Scope)	130	266	271	277	282	288	294	299	305	312	318	324
BESS O&M	728	1,492	1,530	1,568	1,607	1,647	1,689	1,731	1,774	1,818	1,864	1,910
Spare Parts	135	271	271	271	271	271	271	271	271	271	271	271
LC fees	290	580	580	580	580	580	580	580	580	580	580	580
Property Tax												
Land Lease	951	1,569	1,581	1,593	1,605	1,617	1,629	1,641	1,654	1,666	1,679	1,691
Insurance Expense (Projects)	292	584	584	584	584	584	584	584	584	584	584	584
Audit & Tax Expense (Projects)	942	1,931	1,980	2,029	2,080	2,132	2,185	2,240	2,296	2,353	2,412	2,472
Other Operating Expenses	178	1,365	1,356	1,520	1,204	1,136	663	670	676	682	689	695
Total Operating Expenses	**4,033**	**8,845**	**8,954**	**9,246**	**9,119**	**9,178**	**8,837**	**8,976**	**9,143**	**9,544**	**9,699**	**9,857**
EBITDA	**9,287**	**15,287**	**11,986**	**11,921**	**14,920**	**14,078**	**14,580**	**14,080**	**14,574**	**14,508**	**15,533**	**15,508**
EBITDA %	*69.7%*	*63.3%*	*57.2%*	*56.3%*	*62.1%*	*60.5%*	*62.3%*	*61.1%*	*61.5%*	*60.3%*	*61.6%*	*61.1%*
[2] Depreciation & Amortization Expenses	51,615	83,240	51,196	31,856	31,543	17,025	2,652	2,639	2,630	2,626	2,630	2,626
Depreciation & Amortization Expenses %	*387.5%*	*344.9%*	*244.5%*	*150.5%*	*131.2%*	*73.2%*	*11.3%*	*11.4%*	*11.1%*	*10.9%*	*10.4%*	*10.4%*
EBIT	**(42,328)**	**(67,953)**	**(39,209)**	**(19,936)**	**(16,623)**	**(2,947)**	**11,927**	**11,441**	**11,944**	**11,883**	**12,904**	**12,882**
EBIT %	*(317.8%)*	*(281.6%)*	*(187.2%)*	*(94.2%)*	*(69.2%)*	*(12.7%)*	*50.9%*	*49.6%*	*50.4%*	*49.4%*	*51.1%*	*50.8%*
Income Taxes	(8,889)	(14,270)	(8,234)	(4,186)	(3,491)	(619)	2,505	2,403	2,508	2,495	2,710	2,705
[3] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net Operating Profit After Tax	**(33,439)**	**(53,683)**	**(30,975)**	**(15,749)**	**(13,132)**	**(2,328)**	**9,422**	**9,038**	**9,436**	**9,387**	**10,194**	**10,177**
[2] Plus: Depreciation & Amortization Expenses	51,615	83,240	51,196	31,856	31,543	17,025	2,652	2,639	2,630	2,626	2,630	2,626
Plus: Depreciation & Amortization Expenses %	*387.5%*	*344.9%*	*244.5%*	*150.5%*	*131.2%*	*73.2%*	*11.3%*	*11.4%*	*11.1%*	*10.9%*	*10.4%*	*10.4%*
[4] (Increase) / Decrease in Net Working Capital	5,137	(490)	268	5	(246)	72	(44)	41	(41)	9	(87)	2
Free Cash Flow	**23,313**	**29,068**	**20,488**	**16,113**	**18,164**	**14,769**	**12,030**	**11,718**	**12,025**	**12,022**	**12,736**	**12,805**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[5] Present Value Period	0.2507	1.0014	2.0014	3.0014	4.0014	5.0014	6.0014	7.0014	8.0014	9.0014	10.0014	11.0014
Present Value Factor @ 12.3% Discount Rate	0.9714	0.8907	0.7935	0.7069	0.6298	0.5610	0.4998	0.4453	0.3967	0.3534	0.3148	0.2805
Discounted Cash Flow	**22,647**	**25,891**	**16,258**	**11,390**	**11,439**	**8,286**	**6,013**	**5,218**	**4,770**	**4,248**	**4,010**	**3,591**
Sum of Discounted Cash Flows	**149,044**											
[6] Investment Tax Credit Recapture Liability	144,082											
Fair Market Value of PP&E	**293,000**											

Sensitivity Analysis			
Discount Rate	12.75%	12.25%	11.75%
Value Indication	288,500	293,000	298,000

Key Assumptions	
Selected Tax Rate	21.0%
Weighted Average Cost of Capital	12.25%

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Depreciation expenses and amortization expenses projections were estimated by KPMG. Refer to Schedule 6 for more details.
[3] Based on the blended federal and Nevada state corporate income tax rate.
[4] Estimated working capital requirement based on 30 days of revenue and 30 days of expenses.
[5] Assumed mid-period cash flow receipts.
[6] Investment Tax Credit (ITC) recapture liability refers to the repayment of tax benefits that a taxpayer previously claimed through the ITC if the qualifying property is disposed of or otherwise ceases to meet the eligibility criertia for the credit.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 5**
Property, Plant, and Equipment - Income Approach — **Page 2 of 3**
As of July 1, 2023 — *(USD in thousands)*

	Projected											
	CYE [1]											
	12/31/35	12/31/36	12/31/37	12/31/38	12/31/39	12/31/40	12/31/41	12/31/42	12/31/43	12/31/44	12/31/45	12/31/46
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Total Production (MWh)	**489,807**	**487,826**	**485,857**	**483,897**	**481,944**	**479,994**	**478,056**	**476,127**	**474,205**	**472,286**	**470,380**	**468,481**
Growth/(Degradation) %	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*
PPA Production (MWh)	548,146	548,146	548,146	548,146	548,146	528,781	252,387	23,316	23,316	23,316	23,316	23,316
Merchant Price ($/MWh)	32.96	34.18	35.29	36.32	37.99	38.63	39.80	40.26	41.96	42.70	44.96	46.26
Merchant Revenue	18,067	18,734	19,347	19,910	20,824	20,429	10,044	939	978	996	1,048	1,079
Merchant Revenue Growth %	*3.8%*	*3.7%*	*3.3%*	*2.9%*	*4.6%*	*-1.9%*	*-50.8%*	*-90.7%*	*4.2%*	*1.8%*	*5.3%*	*2.9%*
Contracted REC Production (MWh)	-	-	-	-	-	-	-	-	-	-	-	-
Merchant REC Price ($/MWh)	7.20	7.01	6.14	6.27	5.69	5.81	5.81	5.81	5.81	5.81	5.81	5.81
Merchant REC Revenue	-	-	-	-	-	-	-	-	-	-	-	-
Merchant REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Storage Capacity (MW)	90	90	90	90	90	90	90	-	-	-	-	-
Merchant Storage Price ($/kW-month)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	n/a	n/a	n/a	n/a	n/a
Merchant Storage Revenue	7,560	7,560	7,560	7,560	7,560	7,560	7,560	-	-	-	-	-
Merchant Storage Revenue Growth %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*-100.0%*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Power Production (MWh)	(58,339)	(60,320)	(62,289)	(64,250)	(66,202)	(48,787)	225,669	452,811	450,890	448,971	447,064	445,165
Merchant Power Price ($/MWh)	32.96	34.18	35.29	36.32	37.99	38.63	39.80	40.26	41.96	42.70	44.96	46.26
Merchant Power Revenue	(1,923)	(2,062)	(2,198)	(2,334)	(2,515)	(1,885)	8,981	18,230	18,920	19,171	20,098	20,593
Merchant Power Revenue Growth %	*7.4%*	*7.2%*	*6.6%*	*6.1%*	*7.8%*	*-25.1%*	*-576.5%*	*103.0%*	*3.8%*	*1.3%*	*4.8%*	*2.5%*
Merchant REC Production (MWh)	256,181	254,200	252,231	250,270	248,318	260,773	467,189	475,131	473,210	471,291	469,384	467,485
Merchant REC Price ($/MWh)	7.20	7.01	6.14	6.27	5.69	5.81	5.19	5.30	5.40	5.51	5.62	4.93
Merchant REC Revenue	1,844	1,783	1,550	1,568	1,413	1,514	2,426	2,517	2,557	2,597	2,639	2,305
Merchant REC Revenue Growth %	*-15.5%*	*-3.3%*	*-13.1%*	*1.2%*	*-9.9%*	*7.1%*	*60.3%*	*3.7%*	*1.6%*	*1.6%*	*1.6%*	*-12.7%*
Total Revenue	**25,548**	**26,015**	**26,258**	**26,704**	**27,282**	**27,618**	**29,012**	**21,685**	**22,455**	**22,764**	**23,785**	**23,976**
Total Revenue Growth %	*0.7%*	*1.8%*	*0.9%*	*1.7%*	*2.2%*	*1.2%*	*5.0%*	*-25.3%*	*3.5%*	*1.4%*	*4.5%*	*0.8%*
Fixed Scope O&M	1,355	1,382	1,410	1,438	1,467	1,496	1,526	1,556	1,587	1,619	1,652	1,685
O&M Contingency (Out of Scope)	331	337	344	351	358	365	372	380	387	395	403	411
BESS O&M	1,958	2,007	2,057	2,109	2,161	2,216	2,271	2,328	2,386	2,446	2,507	2,569
Spare Parts	271	271	271	271	271	271	271	271	271	271	271	271
LC fees	580	580	580	580	580	580	580	580	580	580	580	580
Property Tax												
Land Lease	1,704	1,717	1,730	1,743	1,756	1,769	1,782	1,795	1,809	1,822	1,836	1,850
Insurance Expense (Projects)	584	584	584	584	584	584	584	584	584	584	584	584
Audit & Tax Expense (Projects)	2,534	2,598	2,663	2,729	2,797	2,867	2,939	3,012	3,088	3,165	3,244	3,325
Other Operating Expenses	702	709	716	723	731	724	533	373	373	374	374	374
Total Operating Expenses	**10,019**	**10,185**	**10,355**	**10,528**	**10,705**	**10,872**	**10,858**	**10,880**	**11,066**	**11,256**	**11,451**	**11,650**
EBITDA	**15,529**	**15,830**	**15,903**	**16,176**	**16,577**	**16,747**	**18,154**	**10,805**	**11,389**	**11,507**	**12,334**	**12,326**
EBITDA %	*60.8%*	*60.8%*	*60.6%*	*60.6%*	*60.8%*	*60.6%*	*62.6%*	*49.8%*	*50.7%*	*50.6%*	*51.9%*	*51.4%*
[2] Depreciation & Amortization Expenses	2,630	2,626	2,630	1,465	305	305	305	305	152	-	-	-
Depreciation & Amortization Expenses %	*10.3%*	*10.1%*	*10.0%*	*5.5%*	*1.1%*	*1.1%*	*1.1%*	*1.4%*	*0.7%*	*0.0%*	*0.0%*	*0.0%*
EBIT	**12,899**	**13,204**	**13,274**	**14,711**	**16,272**	**16,442**	**17,849**	**10,500**	**11,237**	**11,507**	**12,334**	**12,326**
EBIT %	*50.5%*	*50.8%*	*50.6%*	*55.1%*	*59.6%*	*59.5%*	*61.5%*	*48.4%*	*50.0%*	*50.6%*	*51.9%*	*51.4%*
Income Taxes	2,709	2,773	2,787	3,089	3,417	3,453	3,748	2,205	2,360	2,417	2,590	2,589
[3] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net Operating Profit After Tax	**10,190**	**10,431**	**10,486**	**11,622**	**12,855**	**12,989**	**14,101**	**8,295**	**8,877**	**9,091**	**9,744**	**9,738**
[2] Plus: Depreciation & Amortization Expenses	2,630	2,626	2,630	1,465	305	305	305	305	152	-	-	-
Plus: Depreciation & Amortization Expenses %	*10.3%*	*10.1%*	*10.0%*	*5.5%*	*1.1%*	*1.1%*	*1.1%*	*1.4%*	*0.7%*	*0.0%*	*0.0%*	*0.0%*
[4] (Increase) / Decrease in Net Working Capital	(2)	(21)	(10)	(22)	(33)	(10)	(119)	604	(48)	(7)	(71)	1
Free Cash Flow	**12,818**	**13,036**	**13,106**	**13,065**	**13,127**	**13,284**	**14,286**	**9,204**	**8,981**	**9,084**	**9,673**	**9,738**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[5] Present Value Period	12.0014	13.0014	14.0014	15.0014	16.0014	17.0014	18.0014	19.0014	20.0014	21.0014	22.0014	23.0014
Present Value Factor @ 12.3% Discount Rate	0.2499	0.2226	0.1983	0.1767	0.1574	0.1402	0.1249	0.1113	0.0991	0.0883	0.0787	0.0701
Discounted Cash Flow	**3,203**	**2,902**	**2,599**	**2,308**	**2,066**	**1,862**	**1,784**	**1,024**	**890**	**802**	**761**	**683**

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Depreciation expenses and amortization expenses projections were estimated by KPMG. Refer to Schedule 6 for more details.
[3] Based on the blended federal and Nevada state corporate income tax rate.
[4] Estimated working capital requirement based on 30 days of revenue and 30 days of expenses.
[5] Assumed mid-period cash flow receipts.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 5**
Property, Plant, and Equipment - Income Approach — **Page 3 of 3**
As of July 1, 2023 — *(USD in thousands)*

	Projected CYE [1]									
	12/31/47	12/31/48	12/31/49	12/31/50	12/31/51	12/31/52	12/31/53	12/31/54	12/31/55	12/31/56
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Total Production (MWh)	**466,590**	**464,701**	**462,825**	**460,956**	**459,093**	**456,952**	**454,646**	**452,352**	**450,070**	**427,065**
Growth/(Degradation) %	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.4%*	*-0.5%*	*-0.5%*	*-0.5%*	*-0.5%*	*-5.1%*
PPA Production (MWh)	23,316	23,316	23,316	23,316	23,316	-	-	-	-	-
Merchant Price ($/MWh)	48.52	49.73	50.97	52.25	53.55	54.89	-	-	-	-
Merchant Revenue	1,131	1,159	1,188	1,218	1,249	-	-	-	-	-
Merchant Revenue Growth %	*4.9%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*nmf*	*n/a*	*n/a*	*n/a*	*n/a*
Contracted REC Production (MWh)	-	-	-	-	-	-	-	-	-	-
Merchant REC Price ($/MWh)	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81
Merchant REC Revenue	-	-	-	-	-	-	-	-	-	-
Merchant REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Storage Capacity (MW)	-	-	-	-	-	-	-	-	-	-
Merchant Storage Price ($/kW-month)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Merchant Storage Revenue	-	-	-	-	-	-	-	-	-	-
Merchant Storage Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Merchant Power Production (MWh)	443,274	441,386	439,509	437,641	435,778	456,952	454,646	452,352	450,070	427,065
Merchant Power Price ($/MWh)	48.52	49.73	50.97	52.25	53.55	54.89	56.26	57.67	59.11	58.07
Merchant Power Revenue	21,506	21,950	22,403	22,865	23,337	25,081	25,579	26,086	26,603	24,802
Merchant Power Revenue Growth %	*4.4%*	*2.1%*	*2.1%*	*2.1%*	*2.1%*	*7.5%*	*2.0%*	*2.0%*	*2.0%*	*-6.8%*
Merchant REC Production (MWh)	465,594	463,706	461,829	459,961	458,098	456,952	454,646	452,352	450,070	427,065
Merchant REC Price ($/MWh)	5.03	5.15	5.28	5.42	5.55	5.69	5.83	5.98	6.13	6.28
Merchant REC Revenue	2,341	2,390	2,440	2,491	2,543	2,600	2,651	2,704	2,757	2,682
Merchant REC Revenue Growth %	*1.6%*	*2.1%*	*2.1%*	*2.1%*	*2.1%*	*2.2%*	*2.0%*	*2.0%*	*2.0%*	*-2.7%*
Total Revenue	**24,979**	**25,500**	**26,031**	**26,574**	**27,128**	**27,681**	**28,230**	**28,789**	**29,360**	**27,484**
Total Revenue Growth %	*4.2%*	*2.1%*	*2.1%*	*2.1%*	*2.1%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*-6.4%*
Fixed Scope O&M	1,718	1,753	1,788	1,823	1,860	1,897	1,935	1,974	2,013	1,879
O&M Contingency (Out of Scope)	419	428	436	445	454	463	472	482	491	459
BESS O&M	2,634	2,699	2,767	2,836	2,907	2,980	3,054	3,130	3,209	3,015
Spare Parts	271	271	271	271	271	271	271	271	271	248
LC fees	580	580	580	580	580	580	580	580	580	532
Property Tax										
Land Lease	1,864	1,878	1,892	1,906	1,920	1,935	1,949	1,964	1,979	1,493
Insurance Expense (Projects)	584	584	584	584	584	584	584	584	584	536
Audit & Tax Expense (Projects)	3,408	3,494	3,581	3,670	3,762	3,856	3,953	4,051	4,153	3,902
Other Operating Expenses	375	375	376	376	376	356	356	356	356	327
Total Operating Expenses	**11,854**	**12,062**	**12,275**	**12,492**	**12,715**	**12,923**	**13,155**	**13,393**	**13,636**	**12,391**
EBITDA	**13,125**	**13,438**	**13,757**	**14,082**	**14,413**	**14,759**	**15,075**	**15,396**	**15,724**	**15,093**
EBITDA %	*52.5%*	*52.7%*	*52.8%*	*53.0%*	*53.1%*	*53.3%*	*53.4%*	*53.5%*	*53.6%*	*54.9%*
[2] Depreciation & Amortization Expenses	-	-	-	-	-	-	-	-	-	-
Depreciation & Amortization Expenses %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
EBIT	**13,125**	**13,438**	**13,757**	**14,082**	**14,413**	**14,759**	**15,075**	**15,396**	**15,724**	**15,093**
EBIT %	*52.5%*	*52.7%*	*52.8%*	*53.0%*	*53.1%*	*53.3%*	*53.4%*	*53.5%*	*53.6%*	*54.9%*
Income Taxes	2,756	2,822	2,889	2,957	3,027	3,099	3,166	3,233	3,302	3,169
[3] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net Operating Profit After Tax	**10,369**	**10,616**	**10,868**	**11,125**	**11,387**	**11,659**	**11,909**	**12,163**	**12,422**	**11,923**
[2] Plus: Depreciation & Amortization Expenses	-	-	-	-	-	-	-	-	-	-
Plus: Depreciation & Amortization Expenses %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
[4] (Increase) / Decrease in Net Working Capital	(66)	(23)	(29)	(27)	(27)	(25)	(29)	(26)	(27)	1,292
Free Cash Flow	**10,303**	**10,593**	**10,839**	**11,098**	**11,359**	**11,634**	**11,880**	**12,137**	**12,395**	**13,216**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9153
[5] Present Value Period	24.0014	25.0014	26.0014	27.0014	28.0014	29.0014	30.0014	31.0014	32.0014	32.9590
Present Value Factor @ 12.3% Discount Rate	0.0624	0.0556	0.0496	0.0441	0.0393	0.0350	0.0312	0.0278	0.0248	0.0222
Discounted Cash Flow	**643**	**589**	**537**	**490**	**447**	**408**	**371**	**337**	**307**	**268**

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Depreciation expenses and amortization expenses projections were estimated by KPMG. Refer to Schedule 6 for more details
[3] Based on the blended federal and Nevada state corporate income tax rate
[4] Estimated working capital requirement based on 30 days of revenue and 30 days of expenses
[5] Assumed mid-period cash flow receipts.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 6**
Property, Plant, and Equipment - Tax Depreciation — **Page 1 of 1**
As of July 1, 2023 — *(USD in thousands)*

[1]	Fair Market Value of PP&E	293,000
	Depreciable Basis	**293,000**

Depreciable Basis		
Category	**Allocation % [2]**	**Allocation**
5-year MACRS	84.4%	247,267
7-year MACRS	0.1%	298
15-year MACRS	13.4%	39,335
20-year SLFM	2.1%	6,099
	100.0%	**293,000**

Depreciation & Amortization Schedules [3]

	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029	12/31/2030	12/31/2031	12/31/2032	12/31/2033	12/31/2034	12/31/2035
5-year MACRS	20.0%	32.0%	19.2%	11.5%	11.5%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
7-year MACRS	14.3%	24.5%	17.5%	12.5%	8.9%	8.9%	8.9%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%
15-year MACRS	5.0%	9.5%	8.6%	7.7%	6.9%	6.2%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
20-year SLFM	2.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Depreciation & Amortization Schedules [3]

	12/31/2036	12/31/2037	12/31/2038	12/31/2039	12/31/2040	12/31/2041	12/31/2042	12/31/2043	12/31/2044	12/31/2045	12/31/2046	12/31/2047	12/31/2048
15-year MACRS	5.9%	5.9%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20-year SLFM	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%

Depreciation & Amortization Expenses

	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029	12/31/2030	12/31/2031	12/31/2032	12/31/2033	12/31/2034	12/31/2035
5-year MACRS	49,453	79,126	47,475	28,485	28,485	14,243	-	-	-	-	-	-	-
7-year MACRS	43	73	52	37	27	27	27	13	-	-	-	-	-
15-year MACRS	1,967	3,737	3,363	3,029	2,726	2,451	2,321	2,321	2,325	2,321	2,325	2,321	2,325
20-year SLFM	152	305	305	305	305	305	305	305	305	305	305	305	305
Total Depreciation & Amortization Expenses	**51,615**	**83,240**	**51,196**	**31,856**	**31,543**	**17,025**	**2,652**	**2,639**	**2,630**	**2,626**	**2,630**	**2,626**	**2,630**

Depreciation & Amortization Expenses

	12/31/2036	12/31/2037	12/31/2038	12/31/2039	12/31/2040	12/31/2041	12/31/2042	12/31/2043	12/31/2044	12/31/2045	12/31/2046	12/31/2047	12/31/2048
15-year MACRS	2,321	2,325	1,160	-	-	-	-	-	-	-	-	-	-
20-year SLFM	305	305	305	305	305	305	305	152	-	-	-	-	-
Total Depreciation & Amortization Expenses	**2,626**	**2,630**	**1,465**	**305**	**305**	**305**	**305**	**152**	**-**	**-**	**-**	**-**	**-**

Notes:

[1] As estimated by KPMG.
[2] Based on the KPMG Cost Segregation Study.
[3] Calculated using MACRS and Straight-Line Half-Year Convention convention as published in Internal Revenue Service Publication 946.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 7**
Property, Plant, and Equipment - Weighted Average Cost of Capital — **Page 1 of 1**
As of July 1, 2023

Guideline Public Company	Accounting Standard	Ticker [1]	Moody's Credit Rating	S&P Credit Rating	Country [1]	Observed Beta [2]	Adjusted Debt / Total Equity [3]	Adjusted Debt / TIC [3]	Tax Rate [4]	Unlevered Beta	Relevered Beta
Boralex Inc.	IFRS	TSX:BLX	n/a	n/a	Canada	0.93	115.2%	53.5%	26.7%	0.50	0.60
Brookfield Renewable Corporation	IFRS	TSX:BEPC	n/a	n/a	United States	0.56	55.0%	35.5%	27.7%	0.40	0.48
Clearway Energy, Inc.	US GAAP	NYSE:CWEN.A	n/a	BB	United States	0.76	177.5%	64.0%	27.7%	0.33	0.40
Innergex Renewable Energy Inc.	IFRS	TSX:INE	n/a	NR	Canada	0.76	154.6%	60.7%	26.7%	0.36	0.43
Northland Power Inc.	IFRS	TSX:NPI	n/a	BBB	Canada	0.83	105.8%	51.4%	26.7%	0.46	0.56
TransAlta Corporation	IFRS	TSX:TA	WR	BB+	Canada	1.15	81.4%	44.9%	26.7%	0.72	0.86
NextEra Energy Partners, LP	US GAAP	NYSE:NEP	n/a	BB	United States	0.96	43.8%	30.5%	27.7%	0.73	0.88
Ormat Technologies, Inc.	US GAAP	NYSE:ORA	n/a	n/a	United States	0.62	37.3%	27.2%	27.7%	0.49	0.59
Duke Energy Corporation	US GAAP	NYSE:DUK	Baa2	BBB+	United States	0.70	87.9%	46.8%	27.7%	0.43	0.52
NRG Energy, Inc.	US GAAP	NYSE:NRG	WR	n/a	United States	1.11	76.8%	43.4%	27.7%	0.71	0.85
The Southern Company	US GAAP	NYSE:SO	n/a	n/a	United States	0.82	73.5%	42.4%	27.7%	0.54	0.64
Algonquin Power & Utilities Corp.	US GAAP	TSX:AQN	n/a	BBB	Canada	0.73	59.2%	37.2%	26.7%	0.51	0.61
Atlantica Sustainable Infrastructure plc	IFRS	NasdaqGS:AY	n/a	n/a	United Kingdom	0.82	188.1%	65.3%	20.2%	0.33	0.39
Maximum						1.15	188.1%	65.3%	27.7%	0.73	0.88
Upper Quartile						0.93	115.2%	53.5%	27.7%	0.54	0.64
Mean						0.83	96.6%	46.4%	26.7%	0.50	0.60
Median						0.82	81.4%	44.9%	27.7%	0.49	0.59
Lower Quartile						0.73	59.2%	37.2%	26.7%	0.40	0.48
Minimum						0.56	37.3%	27.2%	20.2%	0.33	0.39
Selected								**20.0%**	**21.0%**	**0.50**	**0.60**

	Cost of Equity	
+	Risk Free Rate [5]	4.1%
+	Currency Risk Premium [6]	0.0%
+	Beta [7]	0.60
x	Equity Risk Premium [8]	5.0%
+	Country Risk Premium [9]	0.0%
+	Size Premium [10]	0.0%
+	Asset Premium [11]	1.0%
+	Company Specific Premium [12]	3.0%
=	**Cost of Equity**	**11.1%**

	Cost of Debt	
+	Pre-Tax Cost of Debt [13]	5.7%
+	Sovereign Spread Premium [14]	0.0%
+	Currency Risk Premium [6]	0.0%
=	**Adjusted Pre-Tax Cost of Debt**	**5.7%**
x	(1-Tax Rate)	79.0%
=	**After-Tax Cost of Debt**	**4.5%**

Weighted Average Cost of Capital		Weight	Contribution
Cost of Equity	11.1%	80.0%	8.8%
Cost of Debt	4.5%	20.0%	0.9%
Property, Plant, and Equipment - Weighted Average Cost of Capital			**9.74%**
Property Tax Rate			**2.6%**
Loaded Discount Rate (Rounded)			**12.25%**

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, S&P Capital IQ.
[2] Based on the 5 year weekly Raw Betas determined using individual closing stock prices, as provided by S&P Capital IQ. If 5 year weekly raw betas were unavailable, raw betas for the longest post-IPO period were used instead
[3] TIC = Total Invested Capital. Based on the average capital structure for the past five years, as provided by S&P Capital IQ. Excludes operating lease liabilities in both, Total Debt and TIC.
[4] The statutory tax rate was used based on the KPMG Global Valuation Network tax rate survey.
[5] Based on the yield of 20-year U.S. treasury bonds on the Valuation Date, as provided by S&P Capital IQ.
[6] Based on macroeconomic factors sourced from the Economist Intelligence Unit and S&P Capital IQ.
[7] Selected beta takes into account differences in leverage between the Company and the publicly traded guideline companies.
[8] Based on KPMG's review of recently published articles, academic studies and surveys that attempt to quantify the expected equity risk premium for U.S. common stocks.
[9] Based on the country risk ratings provided by Damodaran Online's *Risk Premiums for Other Markets*. Represents the risk attributable to the Company's sales in the United States, as no sales occur outside of the United States.
[10] Based on the historical incremental return on companies of similar size as published by Kroll Inc. in the Cost of Capital Navigator as of July 1, 2023.
[11] Based on the historic spread between Moody's Baa-rated Public Utilities cost of debt and the expected returns on equity of public utility stocks.
[12] Represents all other nonsystematic and forecast risks specific to the Company, as estimated by KPMG.
[13] Based on the yield of Moody's Baa-rated Corporate Bonds, which is commensurate with the credit ratings of the GPCs as of the Valuation Date, as provided by S&P Capital IQ.
[14] Based on the difference between similar government bonds for the primary country of operations and the United States as of the Valuation Date.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes **Schedule 8**
Property, Plant, and Equipment - Property Tax Expense **Page 1 of 1**
As of July 1, 2023 *(USD in thousands)*

[1]	**Fair Market Value of PP&E**	**293,000**
[2]	Assessment Ratio	35.0%
	Assessed Value	**102,550**
[2]	**RETA Exempt Rate**	**55.0%**
[2]	**Tax Rate**	**2.6%**

Year	[2]	Assessed Value	Tax	Abatement	Adjusted Taxes
2024	100.0%	102,550	2,676	1,204	1,472
2025	93.0%	95,372	2,489	1,120	1,369
2026	87.0%	89,219	2,328	1,048	1,281
2027	81.0%	83,066	2,168	975	1,192
2028	76.0%	77,938	2,034	915	1,119
2029	71.0%	72,811	1,900	855	1,045
2030	66.0%	67,683	1,766	795	971
2031	62.0%	63,581	1,659	747	913
2032	58.0%	59,479	1,552	699	854
2033	54.0%	55,377	1,445	650	795
2034	50.0%	51,275	1,338	602	736
2035	47.0%	48,199	1,258	566	692
2036	44.0%	45,122	1,178	530	648
2037	41.0%	42,046	1,097	494	603
2038	38.0%	38,969	1,017	458	559
2039	36.0%	36,918	963	434	530
2040	33.0%	33,842	883	397	486
2041	31.0%	31,791	830	373	456
2042	29.0%	29,740	776	349	427
2043	27.0%	27,689	723	325	397
2044	25.0%	25,638	669	301	368
2045	23.0%	23,587	616	277	339
2046	19.0%	19,485	508	229	280
2047	17.0%	17,434	455	205	250
2048	15.0%	15,383	401	181	221
2049	13.0%	13,332	348	157	191
2050	11.0%	11,281	294	132	162
2051	9.0%	9,230	241	108	132
2052	7.0%	7,179	187	84	103
2053	5.0%	5,128	134	60	74
2054	5.0%	5,128	134	60	74
2055	5.0%	5,128	134	60	74
2056	5.0%	5,128	134	60	74

Notes:
[1] As estimated by KPMG. For greater detail, please refer to Schedule 5.
[2] Source: Nevada Department of Taxation: Personal Property Manual 2022-2023.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 9**

Property, Plant, and Equipment - Cost Approach — **Page 1 of 1**

As of July 1, 2023 — *(USD in thousands)*

Plant Details	
Subject	Townsite Solar, LLC
County	Boulder City
Energy Region	Mead
Project Type	Solar Photovoltaic
Capacity (MW)	285.3
Commercial Operations Date	November-21

		Townsite Solar, LLC
[1]	**Replacement Cost New ($ per kW)**	2,322
	Overnight Replacement Cost New	662,467
	Capitalized Interest	2,978
	Concluded Replacement Cost New	**665,444**
[2]	Effective Age (Years)	2
[3]	Percent Good	90%
	Replacement Cost New Less Depreciation	**596,067**

Notes:

[1] Replacement Cost New (RCN) for the Subject Plant is based on the Department of Energy (DOE) Energy Information Administration (EIA) capital cost estimates for solar PV with single axis tracking + AC Coupled Battery Storage projects; and represents an "overnight" cost to construct published in January 2024 in 2023 USD.

[2] The effective age was estimated as of July 1, 2023.

[3] Physical Depreciation was estimated based on S2 Iowa curves with a 0.75 service factor ranging from 10 to 35 years depending on the asset type. The Percent Good represents the remaining utility in the asset after accounting for normal physical and technological depreciation.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes **Schedule 10**
Property, Plant, and Equipment - Componentization Schedule **Page 1 of 1**
As of July 1, 2023 *(USD in thousands)*

	Summary Class	Component [1]	Replacement Cost New [1] [2]	Normal Useful Life	Percent Good [3]	RCN Less Physical Depreciation [3]	Obsolescence [4]	Fair Market Value (FMV) [5]
	Modules	Modules	264,801	35	94%	247,968	(126,078)	121,890
		Inverters	35,426	12	81%	28,533	(14,508)	14,026
	Modules Subtotal		**300,227**			**276,501**	**(140,585)**	**135,916**
	Battery Storage Equipment	Container Supply	136,373	15	84%	114,717	(58,327)	56,390
[6]		Medium-Voltage Feeder Equipment	33,122	15	84%	27,862	(14,166)	13,696
	Battery Storage Equipment Subtotal		**169,496**			**142,579**	**(72,494)**	**70,086**
	Balance of Systems	Racking	124,531	25	90%	112,281	(57,088)	55,192
		Main Power Transformer and Substation	27,072	20	88%	23,757	(12,079)	11,678
		Interconnection	6,219	20	88%	5,457	(2,775)	2,683
	Balance of Systems Subtotal		**157,821**			**141,495**	**(71,942)**	**69,553**
	Structural & Infrastructure	Foundations	37,901	35	94%	35,491	(18,045)	17,446
	Structural & Infrastructure Subtotal		**37,901**			**35,491**	**(18,045)**	**17,446**
	Total - All Facility		**665,444**			**596,067**	**(303,067)**	**293,000**

Notes:

[1] KPMG identified and estimated the associated Replacement Cost New (RCN) for each of the major components of a solar and battery storage facility. These components represent module and battery storage components and other structural and infrastructure only. Value associated with project indirect costs such as project development costs, organizational costs and financing costs are allocated to each of the individual components.

[2] RCN is based on the Department of Energy (DOE) Energy Information Administration (EIA) capital cost estimates for solar PV with single axis tracking and AC coupled battery storage projects published in January 2024.

[3] Physical Depreciation was estimated based on S2 Iowa curves with a 0.75 service factor ranging from 10 to 35 years depending on the asset type. The Percent Good represents the remaining utility in the asset after accounting for normal physical and technological depreciation.

[4] Obsolescence was applied to account for economic conditions external to the asset which reduce the FMV in excess of all identifiable physical depreciation and functional obsolescence. Obsolescence was quantified through a discounted cash flow analysis. Additional details can be found in Schedule 5.

[5] The FMV is the RCN less Physical Depreciation less the Functional and Economic Obsolescence penalties.

[6] Medium-voltage feeder equipment includes, but is not limited to, auxiliary power equipment and transfer switches' inverters' medium-voltage transformers' cabling and conduit equipment foundations; and supervisory control and data acquisition (SCADA) of the battery storage equipment.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes **Schedule 11**

Property, Plant, and Equipment - Economic Obsolescence **Page 1 of 1**

As of July 1, 2023 *(USD in thousands)*

Plant	Townsite Solar, LLC
Replacement Cost New Less Depreciation and Functional Obsolescence	**596,067**
PP&E Value supported by the Income Approach	293,000
Obsolescence Penalty	**303,067**
Obsolescence Factor	**0.49**

Notes:

[1] PP&E value supported by the income approach represents the results of the discounted cash flow analysis can be found on Schedule 5.

[2] Obsolescence is determined as the difference between the value calculated through a discounted cash flow analysis and the replacement cost new less deprecation and functional obsolescence.

Power Purchase Agreements

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes **Schedule 12**
Power Purchase Agreement - Differential Cash Flow Method **Page 1 of 2**
As of July 1, 2023 *(USD in thousands)*

	Projected											
	Stub [1]	CYE [1]										
	12/31/23	12/31/24	12/31/25	12/31/26	12/31/27	12/31/28	12/31/29	12/31/30	12/31/31	12/31/32	12/31/33	12/31/34
Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3	195.3
Total Contracted Production (MWh)	**417,980**	**825,453**	**823,679**	**821,867**	**820,017**	**818,129**	**816,213**	**814,269**	**812,299**	**548,146**	**548,146**	**548,146**
Growth/(Degradation) %	*n/a*	*n/a*	*-0.2%*	*-0.2%*	*-0.2%*	*-0.2%*	*-0.2%*	*-0.2%*	*-0.2%*	*-32.5%*	*0.0%*	*0.0%*
Contracted Cash Flows												
PPA Production (MWh)	297,369	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146	548,146
PPA Price ($/MWh)	68.83	61.64	62.07	64.66	66.05	67.36	68.63	70.09	71.53	72.75	73.99	75.26
PPA Revenue	20,469	33,787	34,022	35,445	36,205	36,921	37,617	38,422	39,207	39,877	40,559	41,253
PPA Revenue Growth %	*n/a*	*n/a*	*0.7%*	*4.2%*	*2.1%*	*2.0%*	*1.9%*	*2.1%*	*2.0%*	*1.7%*	*1.7%*	*1.7%*
Contracted REC Production (MWh)	120,611	277,307	275,533	273,721	271,871	269,982	268,067	266,123	264,153	-	-	-
Contracted REC Price ($/MWh)	23.92	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	n/a	n/a	n/a
Contracted REC Revenue	2,885	3,605	3,582	3,558	3,534	3,510	3,485	3,460	3,434	-	-	-
Contracted REC Revenue Growth %	*n/a*	*n/a*	*-0.6%*	*-0.7%*	*-0.7%*	*-0.7%*	*-0.7%*	*-0.7%*	*-0.7%*	*nmf*	*n/a*	*n/a*
Merchant Power Production (MWh)	(51,709)	(37,213)	(38,987)	(40,799)	(42,649)	(44,538)	(46,453)	(48,397)	(50,367)	(52,364)	(54,363)	(56,355)
Merchant Power Price ($/MWh)	256.31	402.76	243.53	103.55	105.57	107.53	109.40	111.16	112.25	113.25	114.22	115.17
Merchant Power Revenue	(13,254)	(14,988)	(9,495)	(4,225)	(4,502)	(4,789)	(5,082)	(5,380)	(5,654)	(5,930)	(6,209)	(6,491)
Merchant Power Revenue Growth %	*n/a*	*n/a*	*-36.7%*	*-55.5%*	*6.6%*	*6.4%*	*6.1%*	*5.9%*	*5.1%*	*4.9%*	*4.7%*	*4.5%*
Total Contracted Revenue	**10,100**	**22,404**	**28,109**	**34,778**	**35,237**	**35,641**	**36,020**	**36,502**	**36,987**	**33,946**	**34,349**	**34,763**
Total Contracted Revenue Growth %	*n/a*	*n/a*	*25.5%*	*23.7%*	*1.3%*	*1.1%*	*1.1%*	*1.3%*	*1.3%*	*-8.2%*	*1.2%*	*1.2%*
[2] Income Taxes	2,121	4,705	5,903	7,303	7,400	7,485	7,564	7,665	7,767	7,129	7,213	7,300
Income Tax Rate %	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
After-Tax Cash Flow	**7,979**	**17,699**	**22,206**	**27,475**	**27,837**	**28,157**	**28,456**	**28,836**	**29,220**	**26,818**	**27,136**	**27,463**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[3] Present Value Period	0.2507	1.0014	2.0014	3.0014	4.0014	5.0014	6.0014	7.0014	8.0014	9.0014	10.0014	11.0014
Present Value Factor @ 8.0% Discount Rate	0.9809	0.9258	0.8572	0.7937	0.7350	0.6805	0.6301	0.5834	0.5402	0.5002	0.4631	0.4288
Discounted Cash Flow	**7,826**	**16,386**	**19,036**	**21,808**	**20,459**	**19,161**	**17,930**	**16,824**	**15,785**	**13,414**	**12,568**	**11,777**
Market Cash Flows												
[4] Merchant Power Price ($/MWh)	42.90	32.44	27.26	26.98	26.87	27.00	27.49	27.43	29.02	29.63	31.15	31.77
[4] Merchant RECPrice ($/MWh)	12.70	11.67	9.95	10.56	10.65	7.78	7.70	6.71	6.48	6.88	8.80	8.45
Market Revenue	**12,070**	**19,812**	**16,620**	**16,577**	**16,478**	**15,696**	**15,856**	**15,496**	**16,156**	**14,690**	**15,382**	**15,623**
Market Revenue Growth %	*n/a*	*n/a*	*-16.1%*	*-0.3%*	*-0.6%*	*-4.7%*	*1.0%*	*-2.3%*	*4.3%*	*-9.1%*	*4.7%*	*1.6%*
Income Taxes	2,535	4,161	3,490	3,481	3,460	3,296	3,330	3,254	3,393	3,085	3,230	3,281
[2] *Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
After-Tax Differential	**9,535**	**15,652**	**13,130**	**13,096**	**13,018**	**12,400**	**12,526**	**12,242**	**12,763**	**11,605**	**12,152**	**12,342**
Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[3] Present Value Period	0.2507	1.0014	2.0014	3.0014	4.0014	5.0014	6.0014	7.0014	8.0014	9.0014	10.0014	11.0014
Present Value Factor @ 9.8% Discount Rate	0.9769	0.9110	0.8301	0.7564	0.6892	0.6279	0.5722	0.5213	0.4750	0.4328	0.3944	0.3593
Discounted Cash Flow	**9,316**	**14,259**	**10,899**	**9,905**	**8,971**	**7,787**	**7,167**	**6,382**	**6,063**	**5,023**	**4,792**	**4,435**
Discounted Cash Flow Differential	**(1,489)**	**2,127**	**8,137**	**11,903**	**11,488**	**11,374**	**10,763**	**10,442**	**9,722**	**8,391**	**7,776**	**7,342**
Sum of Discounted Cash Flow Differential	**133,561**											
Tax Amortization Benefit	18,999											
Fair Market Value of Contracts	**133,500**											

Sensitivity Analysis

Merchant Discount Rate	Contracted Discount Rate: 7.50%	8.00%	8.50%
9.25%	139,000	130,000	122,000
9.75%	142,500	133,500	125,000
10.25%	145,500	137,000	128,500

Key Assumptions	
Selected Tax Rate	21.0%
Weighted Average Cost of Capital - Contracted	8.00%
Weighted Average Cost of Capital - Merchant	9.75%

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Based on the blended federal and Nevada state corporate income tax rate.
[3] Assumed mid-period cash flow receipts.
[4] Based on the blended Wood Mackenzie and ABB merchant curve provided by Management.
[5] Refer to Schedule 13 for more details.
[6] Refer to Schedule 7 for more details. Represents the rounded PP&E WACC before loading with the property tax rate.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 12**
Power Purchase Agreement - Differential Cash Flow Method — **Page 2 of 2**
As of July 1, 2023 — *(USD in thousands)*

		12/31/35	12/31/36	12/31/37	12/31/38	12/31/39	12/31/40
	Nameplate Capacity (MW AC)	195.3	195.3	195.3	195.3	195.3	195.3
	Total Contracted Production (MWh)	**548,146**	**548,146**	**548,146**	**548,146**	**548,146**	**528,781**
	Growth/(Degradation) %	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*-3.5%*
	Contracted Cash Flows						
	PPA Production (MWh)	548,146	548,146	548,146	548,146	548,146	528,781
	PPA Price ($/MWh)	76.55	79.26	80.62	82.00	83.40	83.18
	PPA Revenue	41,960	43,445	44,189	44,947	45,717	43,983
	PPA Revenue Growth %	*1.7%*	*3.5%*	*1.7%*	*1.7%*	*1.7%*	*-3.8%*
	Contracted REC Production (MWh)	-	-	-	-	-	-
	Contracted REC Price ($/MWh)	n/a	n/a	n/a	n/a	n/a	n/a
	Contracted REC Revenue	-	-	-	-	-	-
	Contracted REC Revenue Growth %	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
	Merchant Power Production (MWh)	(58,339)	(60,320)	(62,289)	(64,250)	(66,202)	(48,787)
	Merchant Power Price ($/MWh)	116.10	118.91	121.61	124.20	126.70	147.27
	Merchant Power Revenue	(6,773)	(7,173)	(7,575)	(7,980)	(8,388)	(7,185)
	Merchant Power Revenue Growth %	*4.4%*	*5.9%*	*5.6%*	*5.3%*	*5.1%*	*-14.3%*
	Total Contracted Revenue	**35,187**	**36,273**	**36,614**	**36,967**	**37,330**	**36,798**
	Total Contracted Revenue Growth %	*1.2%*	*3.1%*	*0.9%*	*1.0%*	*1.0%*	*-1.4%*
[2]	Income Taxes	7,389	7,617	7,689	7,763	7,839	7,728
	Income Tax Rate %	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
	After-Tax Cash Flow	**27,798**	**28,655**	**28,925**	**29,204**	**29,490**	**29,071**
	Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[3]	Present Value Period	12.0014	13.0014	14.0014	15.0014	16.0014	17.0014
	Present Value Factor @ 8.0% Discount Rate	0.3971	0.3677	0.3404	0.3152	0.2919	0.2702
	Discounted Cash Flow	**11,038**	**10,535**	**9,847**	**9,205**	**8,607**	**7,856**
	Market Cash Flows						
[4]	Merchant Power Price ($/MWh)	32.96	34.18	35.29	36.32	37.99	38.63
[4]	Merchant RECPrice ($/MWh)	7.20	7.01	6.14	6.27	5.69	5.81
	Market Revenue	**16,144**	**16,672**	**17,148**	**17,576**	**18,309**	**18,544**
	Market Revenue Growth %	*3.3%*	*3.3%*	*2.9%*	*2.5%*	*4.2%*	*1.3%*
	Income Taxes	3,390	3,501	3,601	3,691	3,845	3,894
[2]	*Income Tax Rate %*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
	After-Tax Differential	**12,754**	**13,171**	**13,547**	**13,885**	**14,464**	**14,650**
	Partial Period Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
[3]	Present Value Period	12.0014	13.0014	14.0014	15.0014	16.0014	17.0014
	Present Value Factor @ 9.8% Discount Rate	0.3274	0.2983	0.2718	0.2477	0.2257	0.2056
	Discounted Cash Flow	**4,176**	**3,929**	**3,682**	**3,439**	**3,264**	**3,012**
	Discounted Cash Flow Differential	**6,862**	**6,606**	**6,165**	**5,766**	**5,343**	**4,844**

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, Management.
[2] Based on the blended federal and Nevada state corporate income tax rate.
[3] Assumed mid-period cash flow receipts.
[4] Based on the blended Wood Mackenzie and ABB merchant curve provided by Management.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Schedule 13**
Power Purchase Agreement - Weighted Average Cost of Capital — **Page 1 of 1**
As of July 1, 2023

Guideline Public Company	Accounting Standard	Ticker [1]	Moody's Credit Rating	S&P Credit Rating	Country [1]	Observed Beta [2]	Adjusted Debt / Total Equity [3]	Adjusted Debt / / TIC [3]	Tax Rate [4]	Unlevered Beta	Relevered Beta
Boralex Inc.	IFRS	TSX:BLX	n/a	n/a	Canada	0.93	115.2%	53.5%	26.7%	0.50	0.67
Brookfield Renewable Corporation	IFRS	TSX:BEPC	n/a	n/a	United States	0.56	55.0%	35.5%	27.7%	0.40	0.54
Clearway Energy, Inc.	US GAAP	NYSE:CWEN.A	n/a	BB	United States	0.76	177.5%	64.0%	27.7%	0.33	0.45
Innergex Renewable Energy Inc.	IFRS	TSX:INE	n/a	NR	Canada	0.76	154.6%	60.7%	26.7%	0.36	0.48
Northland Power Inc.	IFRS	TSX:NPI	n/a	BBB	Canada	0.83	105.8%	51.4%	26.7%	0.46	0.62
TransAlta Corporation	IFRS	TSX:TA	WR	BB+	Canada	1.15	81.4%	44.9%	26.7%	0.72	0.96
NextEra Energy Partners, LP	US GAAP	NYSE:NEP	n/a	BB	United States	0.96	43.8%	30.5%	27.7%	0.73	0.98
Ormat Technologies, Inc.	US GAAP	NYSE:ORA	n/a	n/a	United States	0.62	37.3%	27.2%	27.7%	0.49	0.66
Duke Energy Corporation	US GAAP	NYSE:DUK	Baa2	BBB+	United States	0.70	87.9%	46.8%	27.7%	0.43	0.58
NRG Energy, Inc.	US GAAP	NYSE:NRG	WR	n/a	United States	1.11	76.8%	43.4%	27.7%	0.71	0.95
The Southern Company	US GAAP	NYSE:SO	n/a	n/a	United States	0.82	73.5%	42.4%	27.7%	0.54	0.72
Algonquin Power & Utilities Corp.	US GAAP	TSX:AQN	n/a	BBB	Canada	0.73	59.2%	37.2%	26.7%	0.51	0.69
Atlantica Sustainable Infrastructure plc	IFRS	NasdaqGS:AY	n/a	n/a	United Kingdom	0.82	188.1%	65.3%	20.2%	0.33	0.44
Maximum						1.15	188.1%	65.3%	27.7%	0.73	0.98
Upper Quartile						0.93	115.2%	53.5%	27.7%	0.54	0.72
Mean						0.83	96.6%	46.4%	26.7%	0.50	0.67
Median						0.82	81.4%	44.9%	27.7%	0.49	0.66
Lower Quartile						0.73	59.2%	37.2%	26.7%	0.40	0.54
Minimum						0.56	37.3%	27.2%	20.2%	0.33	0.44
Selected								**30.0%**	**21.0%**	**0.50**	**0.67**

	Cost of Equity	
+	Risk Free Rate [5]	4.1%
+	Currency Risk Premium [6]	0.0%
+	Beta [7]	0.67
x	Equity Risk Premium [8]	5.0%
+	Country Risk Premium [9]	0.0%
+	Size Premium [10]	0.0%
+	Asset Premium [11]	1.0%
+	Company Specific Premium [12]	1.0%
=	**Cost of Equity**	**9.4%**

	Cost of Debt	
+	Pre-Tax Cost of Debt [13]	5.7%
+	Sovereign Spread Premium [14]	0.0%
+	Currency Risk Premium [6]	0.0%
=	**Adjusted Pre-Tax Cost of Debt**	**5.7%**
x	(1-Tax Rate)	79.0%
=	**After-Tax Cost of Debt**	**4.5%**

Weighted Average Cost of Capital		Weight	Contribution
Cost of Equity	9.4%	70.0%	6.6%
Cost of Debt	4.5%	30.0%	1.3%
Power Purchase Agreement - Weighted Average Cost of Capital (rounded)			**8.00%**

Notes:

[1] Unless otherwise noted, information directly sourced from, or calculated based on information provided by, S&P Capital IQ.
[2] Based on the 5 year weekly Raw Betas determined using individual closing stock prices, as provided by S&P Capital IQ. If 5 year weekly raw betas were unavailable, raw betas for the longest post-IPO period were used instead.
[3] TIC = Total Invested Capital. Based on the average capital structure for the past five years, as provided by S&P Capital IQ. Excludes operating lease liabilities in both, Total Debt and TIC.
[4] The statutory tax rate was used based on the KPMG Global Valuation Network tax rate survey.
[5] Based on the yield of 20-year U.S. treasury bonds on the Valuation Date, as provided by S&P Capital IQ.
[6] Based on macroeconomic factors sourced from the Economist Intelligence Unit and S&P Capital IQ.
[7] Selected beta takes into account differences in leverage between the Company and the publicly traded guideline companies.
[8] Based on KPMG's review of recently published articles, academic studies and surveys that attempt to quantify the expected equity risk premium for U.S. common stocks.
[9] Based on the country risk ratings provided by Damodaran Online's *Risk Premiums for Other Markets*. Represents the risk attributable to the Company's sales in the United States, as no sales occur outside of the United States.
[10] Based on the historical incremental return on companies of similar size as published by Kroll Inc. in the Cost of Capital Navigator as of July 1, 2023.
[11] Based on the historic spread between Moody's Baa-rated Public Utilities cost of debt and the expected returns on equity of public utility stocks.
[12] Represents all other nonsystematic and forecast risks specific to the Company, as estimated by KPMG.
[13] Based on the yield of Moody's Baa-rated Corporate Bonds, which is commensurate with the credit ratings of the GPCs as of the Valuation Date, as provided by S&P Capital IQ.
[14] Based on the difference between similar government bonds for the primary country of operations and the United States as of the Valuation Date.

Workpapers

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Workpaper 1**

Property, Plant, and Equipment - Capitalized Interest — **Page 1 of 1**

As of July 1, 2023 — *(USD in thousands)*

Assumptions	
% of Project Financed with Debt	20.0%
Industry Average Cost of Debt	4.5%
Typical Project Duration (Years)	1

Plant	Townsite Solar, LLC
Overnight Replacement Cost New	**662,467**
Beginning Accumulated Expenditures	-
Expenditures Incurred During the Year	662,467
Ending Accumulated Expenditures	662,467
Average Accumulated Expenditures	331,233
Interest Costs to be Capitalized	**2,978**

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes
Guideline Public Company Financial Data
As of July 1, 2023
Source: S&P Capital IQ

Workpaper 2
Page 1 of 3
(USD in millions)

Guideline Public Company	Ticker	As of July 1, 2023 Market Capitalization	Total Debt	Less: Operating	Adjusted Total Debt	NCI	Preferred Equity	Adjusted TIC	Unrestricted Cash	Adjusted BEV
		A			B	C	D	E = A+B+C+D	F	E-F
Boralex Inc.	TSX:BLX	2,801.0	2,739.8	-	2,739.8	277.2	-	5,818.0	430.2	5,387.8
Brookfield Renewable Corporation	TSX:BEPC	11,677.6	13,951.0	-	13,951.0	10,791.0	-	36,419.6	657.0	35,762.6
Clearway Energy, Inc.	NYSE:CWEN.A	3,159.0	7,713.0	577.0	7,136.0	2,015.0	-	12,310.0	603.0	11,707.0
Innergex Renewable Energy Inc.	TSX:INE	1,903.1	4,466.3	-	4,466.3	116.6	96.9	6,582.9	116.2	6,466.7
Northland Power Inc.	TSX:NPI	5,268.4	5,364.2	-	5,364.2	244.4	107.1	10,984.0	803.2	10,180.8
TransAlta Corporation	TSX:TA	2,470.8	3,232.1	-	3,232.1	626.0	696.2	7,025.1	921.6	6,103.4
NextEra Energy Partners, LP	NYSE:NEP	5,248.4	5,359.0	-	5,359.0	11,172.0	-	21,779.4	238.0	21,541.4
Ormat Technologies, Inc.	NYSE:ORA	4,835.6	2,114.2	21.8	2,092.4	161.9	-	7,089.9	414.9	6,675.1
Duke Energy Corporation	NYSE:DUK	69,158.3	77,059.0	851.0	76,208.0	2,691.0	1,962.0	150,019.3	544.0	149,475.3
NRG Energy, Inc.	NYSE:NRG	8,608.4	12,608.0	290.0	12,318.0	-	650.0	21,576.4	417.0	21,159.4
The Southern Company	NYSE:SO	77,092.5	60,550.0	1,573.0	58,977.0	4,034.0	-	140,103.5	1,053.0	139,050.5
Algonquin Power & Utilities Corp.	TSX:AQN	5,714.8	7,921.8	21.7	7,900.1	1,899.1	184.3	15,698.3	61.0	15,637.3
Atlantica Sustainable Infrastructure plc	NasdaqGS:AY	2,801.1	5,763.0	-	5,763.0	183.4	-	8,747.4	783.4	7,964.0
Maximum		77,093	77,059	1,573	76,208	11,172	1,962	150,019	1,053	149,475
Upper Quartile		8,608	12,608	290	12,318	2,691	184	17,168	783	21,541
Mean		15,441	16,065	257	15,808	2,632	284	22,208	542	33,624
Median		5,248	5,763	-	5,763	626	-	7,058	544	11,707
Lower Quartile		2,801	4,466	-	4,466	183	-	-	415	6,675
Minimum		1,903	2,114	-	2,092	-	-	-	61	5,388

Guideline Public Company	Ticker	NWC % of Revenue excl. Operating Leases CY-2	CY-1	CY	LTM	D&A % of Revenue CY-2	CY-1	CY	LTM	Capex % of Revenue CY-2	CY-1	CY	LTM
Boralex Inc.	TSX:BLX	5.7%	6.9%	(13.2%)	(23.1%)	34.4%	39.8%	32.3%	29.8%	22.9%	24.2%	29.4%	29.6%
Brookfield Renewable Corporation	TSX:BEPC	(245.0%)	(165.9%)	(81.2%)	(116.9%)	33.4%	32.5%	30.5%	30.0%	11.7%	39.5%	21.9%	21.3%
Clearway Energy, Inc.	NYSE:CWEN.A	19.3%	40.7%	25.5%	32.8%	43.2%	48.3%	57.5%	54.8%	10.3%	13.4%	9.4%	12.1%
Innergex Renewable Energy Inc.	TSX:INE	4.4%	0.8%	10.7%	10.7%	36.3%	33.4%	37.6%	36.8%	89.8%	38.7%	17.1%	26.5%
Northland Power Inc.	TSX:NPI	16.5%	5.8%	(12.5%)	(5.8%)	27.5%	30.0%	25.0%	25.9%	11.0%	22.4%	18.5%	18.2%
TransAlta Corporation	TSX:TA	17.6%	6.0%	(3.8%)	(4.1%)	39.4%	26.2%	20.5%	20.3%	23.1%	17.6%	30.8%	33.9%
NextEra Energy Partners, LP	NYSE:NEP	(1.3%)	6.2%	29.0%	16.7%	40.8%	41.2%	47.3%	47.4%	36.4%	11.5%	111.6%	104.4%
Ormat Technologies, Inc.	NYSE:ORA	24.0%	24.9%	27.7%	27.3%	22.7%	28.2%	27.8%	28.5%	45.5%	63.2%	76.8%	72.5%
Duke Energy Corporation	NYSE:DUK	(2.7%)	2.2%	7.9%	9.9%	23.9%	23.4%	20.6%	20.0%	43.2%	40.1%	40.1%	41.8%
NRG Energy, Inc.	NYSE:NRG	3.1%	10.2%	9.4%	1.7%	6.6%	3.6%	2.9%	2.8%	2.5%	1.0%	1.2%	1.4%
The Southern Company	NYSE:SO	(0.8%)	0.4%	(0.5%)	5.9%	19.2%	17.2%	13.9%	14.8%	36.9%	32.8%	27.1%	28.7%
Algonquin Power & Utilities Corp.	TSX:AQN	(11.4%)	(8.6%)	(2.5%)	4.1%	18.7%	17.7%	16.5%	16.3%	46.9%	59.1%	39.4%	33.1%
Atlantica Sustainable Infrastructure plc	NasdaqGS:AY	20.6%	32.7%	23.1%	13.1%	40.3%	34.2%	35.8%	36.3%	0.3%	0.6%	3.3%	3.7%
Observations		13	13	13	13	13	13	13	13	13	13	13	13
Maximum		*24.0%*	*40.7%*	*29.0%*	*32.8%*	*43.2%*	*48.3%*	*57.5%*	*54.8%*	*89.8%*	*63.2%*	*111.6%*	*104.4%*
Upper Quartile		*17.6%*	*10.2%*	*23.1%*	*13.1%*	*39.4%*	*34.2%*	*35.8%*	*36.3%*	*43.2%*	*39.5%*	*39.4%*	*33.9%*
Mean		*(11.6%)*	*(2.9%)*	*1.5%*	*(2.1%)*	*29.7%*	*28.9%*	*28.3%*	*28.0%*	*29.3%*	*28.0%*	*32.8%*	*32.9%*
Median		*4.4%*	*6.0%*	*7.9%*	*5.9%*	*33.4%*	*30.0%*	*27.8%*	*28.5%*	*23.1%*	*24.2%*	*27.1%*	*28.7%*
Lower Quartile		*(1.3%)*	*0.8%*	*(3.8%)*	*(4.1%)*	*22.7%*	*23.4%*	*20.5%*	*20.0%*	*11.0%*	*13.4%*	*17.1%*	*18.2%*
Minimum		*(245.0%)*	*(165.9%)*	*(81.2%)*	*(116.9%)*	*6.6%*	*3.6%*	*2.9%*	*2.8%*	*0.3%*	*0.6%*	*1.2%*	*1.4%*

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Workpaper 2**
Guideline Public Company Financial Data — **Page 2 of 3**
As of July 1, 2023 — *(USD in millions)*
Source: S&P Capital IQ

Guideline Public Company	Ticker	Revenue LTM As of Date	Revenue CY+1 As of Date	LTM Revenue	Revenue Growth CY-2 CY-1	CY-1 CY	CY CY+1	CY+1 CY+2	CY+2 CY+3	CY+3 CY+4	CY+4 CY+5	CY+5 CY+6
Boralex Inc.	TSX:BLX	3/31/2023	12/31/2023	672.6	9.9%	13.1%	9.8%	(3.7%)	12.5%	1.8%	2.8%	n/a
Brookfield Renewable Corporation	TSX:BEPC	3/31/2023	12/31/2023	3,957.0	7.6%	13.0%	23.2%	(5.0%)	6.6%	8.0%	8.0%	n/a
Clearway Energy, Inc.	NYSE:CWEN.A	3/31/2023	12/31/2023	1,264.0	7.3%	(7.5%)	14.9%	1.6%	4.2%	8.7%	4.3%	n/a
Innergex Renewable Energy Inc.	TSX:INE	3/31/2023	12/31/2023	651.2	22.7%	8.9%	16.7%	4.8%	6.1%	(6.1%)	(2.6%)	n/a
Northland Power Inc.	TSX:NPI	3/31/2023	12/31/2023	1,755.7	2.3%	9.4%	(6.8%)	4.1%	(1.1%)	12.1%	12.4%	n/a
TransAlta Corporation	TSX:TA	3/31/2023	12/31/2023	2,461.2	30.4%	2.3%	0.7%	(23.2%)	(0.5%)	(19.9%)	(2.8%)	n/a
NextEra Energy Partners, LP	NYSE:NEP	3/31/2023	12/31/2023	1,231.0	7.1%	23.3%	33.6%	10.8%	11.8%	12.3%	21.2%	n/a
Ormat Technologies, Inc.	NYSE:ORA	3/31/2023	12/31/2023	735.7	(6.0%)	10.7%	14.0%	13.6%	17.8%	12.7%	n/a	n/a
Duke Energy Corporation	NYSE:DUK	3/31/2023	12/31/2023	28,584.0	5.4%	17.0%	0.3%	3.3%	4.5%	1.9%	3.1%	n/a
NRG Energy, Inc.	NYSE:NRG	3/31/2023	12/31/2023	31,369.0	196.8%	16.9%	(58.8%)	20.9%	(0.4%)	(0.7%)	n/a	n/a
The Southern Company	NYSE:SO	3/31/2023	12/31/2023	29,111.0	13.4%	26.7%	(7.1%)	4.7%	3.0%	2.8%	5.0%	n/a
Algonquin Power & Utilities Corp.	TSX:AQN	3/31/2023	12/31/2023	2,810.5	35.6%	21.6%	3.2%	3.9%	6.2%	(1.3%)	3.7%	n/a
Atlantica Sustainable Infrastructure plc	NasdaqGS:AY	3/31/2023	12/31/2023	1,097.1	19.6%	(9.1%)	6.3%	6.0%	1.9%	1.7%	15.9%	n/a
Observations				13	13	13	13	13	13	13	11	-
Maximum				31,369	*196.8%*	*26.7%*	*33.6%*	*20.9%*	*17.8%*	*12.7%*	*21.2%*	*n/a*
Upper Quartile				3,957	*22.7%*	*17.0%*	*14.9%*	*6.0%*	*6.6%*	*8.7%*	*10.2%*	*n/a*
Mean				8,131	*27.1%*	*11.3%*	*3.9%*	*3.2%*	*5.6%*	*2.6%*	*6.5%*	*n/a*
Median				1,756	*9.9%*	*13.0%*	*6.3%*	*4.1%*	*4.5%*	*1.9%*	*4.3%*	*n/a*
Lower Quartile				1,097	*7.1%*	*8.9%*	*0.3%*	*1.6%*	*1.9%*	*(0.7%)*	*3.0%*	*n/a*
Minimum				651	*(6.0%)*	*(9.1%)*	*(58.8%)*	*(23.2%)*	*(1.1%)*	*(19.9%)*	*(2.8%)*	*n/a*

Guideline Public Company	Ticker	EBITDA LTM As of Date	EBITDA CY+1 As of Date	LTM EBITDA	EBITDA Margins LTM	EBITDA Margins CY-2	CY-1	CY	CY+1	CY+2	CY+3	CY+4	CY+5
Boralex Inc.	TSX:BLX	3/31/2023	12/31/2023	358.5	53.3%	66.4%	68.0%	60.3%	73.0%	80.8%	77.4%	78.6%	77.7%
Brookfield Renewable Corporation	TSX:BEPC	3/31/2023	12/31/2023	2,628.0	66.4%	61.8%	60.4%	65.5%	54.2%	59.0%	65.7%	65.5%	65.4%
Clearway Energy, Inc.	NYSE:CWEN.A	3/31/2023	12/31/2023	1,009.0	79.8%	74.3%	75.2%	76.8%	84.4%	84.5%	83.7%	82.1%	78.6%
Innergex Renewable Energy Inc.	TSX:INE	3/31/2023	12/31/2023	413.1	63.4%	66.7%	59.2%	65.3%	71.1%	71.9%	73.5%	81.2%	80.3%
Northland Power Inc.	TSX:NPI	3/31/2023	12/31/2023	1,158.3	66.0%	68.7%	67.2%	67.5%	55.4%	56.5%	57.7%	55.8%	51.5%
TransAlta Corporation	TSX:TA	3/31/2023	12/31/2023	1,037.7	42.2%	38.6%	41.5%	40.7%	52.7%	52.8%	50.5%	55.5%	54.2%
NextEra Energy Partners, LP	NYSE:NEP	3/31/2023	12/31/2023	908.0	73.8%	80.0%	85.8%	80.3%	124.4%	126.4%	121.0%	115.3%	103.6%
Ormat Technologies, Inc.	NYSE:ORA	3/31/2023	12/31/2023	397.9	54.1%	50.3%	54.6%	52.7%	58.3%	57.7%	52.6%	50.0%	n/a
Duke Energy Corporation	NYSE:DUK	3/31/2023	12/31/2023	12,523.0	43.8%	38.9%	48.3%	44.2%	44.9%	46.3%	47.9%	50.3%	52.5%
NRG Energy, Inc.	NYSE:NRG	3/31/2023	12/31/2023	(1,061.0)	(3.4%)	20.0%	17.5%	9.7%	23.8%	19.8%	19.5%	19.6%	n/a
The Southern Company	NYSE:SO	3/31/2023	12/31/2023	10,494.0	36.0%	45.6%	35.2%	35.6%	37.2%	39.0%	40.9%	41.1%	42.2%
Algonquin Power & Utilities Corp.	TSX:AQN	3/31/2023	12/31/2023	951.9	33.9%	39.1%	33.4%	34.2%	44.7%	45.2%	43.7%	46.5%	46.4%
Atlantica Sustainable Infrastructure plc	NasdaqGS:AY	3/31/2023	12/31/2023	652.3	59.5%	67.4%	61.8%	59.4%	71.3%	70.6%	71.2%	68.9%	62.2%
Observations				13	13	13	13	13	13	13	13	13	11
Maximum				12,523	*79.8%*	*80.0%*	*85.8%*	*80.3%*	*124.4%*	*126.4%*	*121.0%*	*115.3%*	*103.6%*
Upper Quartile				1,158	*66.0%*	*67.4%*	*67.2%*	*65.5%*	*71.3%*	*71.9%*	*73.5%*	*78.6%*	*78.2%*
Mean				2,421	*51.4%*	*55.2%*	*54.5%*	*53.2%*	*61.2%*	*62.3%*	*62.0%*	*62.3%*	*65.0%*
Median				952	*54.1%*	*61.8%*	*59.2%*	*59.4%*	*55.4%*	*57.7%*	*57.7%*	*55.8%*	*62.2%*
Lower Quartile				413	*42.2%*	*39.1%*	*41.5%*	*40.7%*	*44.9%*	*46.3%*	*47.9%*	*50.0%*	*52.0%*
Minimum				(1,061)	*(3.4%)*	*20.0%*	*17.5%*	*9.7%*	*23.8%*	*19.8%*	*19.5%*	*19.6%*	*42.2%*

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes
Guideline Public Company Financial Data
As of July 1, 2023
Source: S&P Capital IQ

Workpaper 2
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(USD in millions)

Guideline Public Company	Ticker	EBIT LTM As of Date	EBIT CY+1 As of Date	EBIT LTM EBIT	EBIT Margins LTM	EBIT Margins CY-2	CY-1	CY	CY+1	CY+2	CY+3	CY+4	CY+5
Boralex Inc.	TSX:BLX	3/31/2023	12/31/2023	158.2	23.5%	31.9%	28.2%	28.0%	34.0%	41.1%	41.5%	45.7%	47.4%
Brookfield Renewable Corporation	TSX:BEPC	3/31/2023	12/31/2023	1,439.0	36.4%	28.4%	27.8%	35.0%	22.0%	24.4%	34.2%	34.1%	33.9%
Clearway Energy, Inc.	NYSE:CWEN.A	3/31/2023	12/31/2023	316.0	25.0%	31.1%	26.9%	19.3%	31.2%	31.1%	32.2%	31.2%	31.4%
Innergex Renewable Energy Inc.	TSX:INE	3/31/2023	12/31/2023	173.2	26.6%	30.3%	25.8%	27.6%	35.8%	36.3%	35.2%	n/a	n/a
Northland Power Inc.	TSX:NPI	3/31/2023	12/31/2023	704.3	40.1%	41.2%	37.2%	42.5%	38.5%	37.5%	37.8%	42.4%	50.1%
TransAlta Corporation	TSX:TA	3/31/2023	12/31/2023	538.8	21.9%	(0.8%)	15.3%	20.2%	30.6%	22.8%	22.6%	n/a	n/a
NextEra Energy Partners, LP	NYSE:NEP	3/31/2023	12/31/2023	325.0	26.4%	39.3%	44.6%	33.0%	20.8%	26.1%	28.2%	30.8%	36.8%
Ormat Technologies, Inc.	NYSE:ORA	3/31/2023	12/31/2023	188.5	25.6%	27.6%	26.4%	24.9%	25.9%	26.8%	26.3%	28.2%	n/a
Duke Energy Corporation	NYSE:DUK	3/31/2023	12/31/2023	6,816.0	23.8%	15.0%	24.9%	23.6%	25.9%	26.6%	27.3%	29.0%	30.3%
NRG Energy, Inc.	NYSE:NRG	3/31/2023	12/31/2023	(1,939.0)	(6.2%)	13.4%	13.9%	6.8%	20.1%	14.0%	12.5%	n/a	n/a
The Southern Company	NYSE:SO	3/31/2023	12/31/2023	6,186.0	21.2%	26.4%	18.0%	21.8%	22.8%	24.6%	25.9%	26.2%	26.8%
Algonquin Power & Utilities Corp.	TSX:AQN	3/31/2023	12/31/2023	494.7	17.6%	20.3%	15.6%	17.7%	22.8%	24.2%	25.3%	27.6%	24.9%
Atlantica Sustainable Infrastructure plc	NasdaqGS:AY	3/31/2023	12/31/2023	254.4	23.2%	27.0%	27.6%	23.6%	30.4%	31.0%	32.2%	33.3%	32.2%
Observations				13	13	13	13	13	13	13	13	10	9
Maximum				6,816	*40.1%*	*41.2%*	*44.6%*	*42.5%*	*38.5%*	*41.1%*	*41.5%*	*45.7%*	*50.1%*
Upper Quartile				704	*26.4%*	*31.1%*	*27.8%*	*28.0%*	*31.2%*	*31.1%*	*34.2%*	*33.9%*	*36.8%*
Mean				1,204	*23.5%*	*25.5%*	*25.6%*	*24.9%*	*27.8%*	*28.2%*	*29.3%*	*32.8%*	*34.9%*
Median				325	*23.8%*	*27.6%*	*26.4%*	*23.6%*	*25.9%*	*26.6%*	*28.2%*	*31.0%*	*32.2%*
Lower Quartile				188	*21.9%*	*20.3%*	*18.0%*	*20.2%*	*22.8%*	*24.4%*	*25.9%*	*28.4%*	*30.3%*
Minimum				(1,939)	*(6.2%)*	*(0.8%)*	*13.9%*	*6.8%*	*20.1%*	*14.0%*	*12.5%*	*26.2%*	*24.9%*

Guideline Public Company	Ticker	Liquidity Ratios: Current Ratio	Liquidity Ratios: Quick Ratio	Profitability Ratios: Adjusted [1] Return on Assets	Profitability Ratios: Return on Equity	Capital Structure Ratios: Adjusted [1] Debt to TIC	Capital Structure Ratios: Interest Coverage	Activity Ratios: Inventory Turnover	Receivables Turnover	Payables Turnover	Adjusted [1] Fixed Assets Turnover	Adjusted [1] Total Assets Turnover
Boralex Inc.	TSX:BLX	1.0x	1.0x	2.5%	1.6%	47.1%	1.7x	n/a	4.6x	1.0x	0.2x	0.1x
Brookfield Renewable Corporation	TSX:BEPC	0.3x	0.3x	3.1%	35.6%	38.3%	1.3x	55.2x	3.3x	1.6x	0.1x	0.1x
Clearway Energy, Inc.	NYSE:CWEN.A	2.0x	1.9x	2.2%	31.4%	58.0%	1.1x	9.5x	8.3x	4.4x	0.2x	0.1x
Innergex Renewable Energy Inc.	TSX:INE	1.0x	0.8x	n/a	(5.2%)	67.8%	0.9x	n/a	5.7x	1.2x	0.1x	0.1x
Northland Power Inc.	TSX:NPI	1.1x	1.0x	5.1%	17.8%	48.8%	2.9x	n/a	6.4x	1.9x	0.2x	0.2x
TransAlta Corporation	TSX:TA	1.5x	1.2x	4.2%	25.1%	46.0%	3.5x	12.7x	4.9x	2.3x	0.6x	0.3x
NextEra Energy Partners, LP	NYSE:NEP	1.4x	0.4x	1.4%	9.9%	24.6%	0.7x	11.5x	8.7x	1.8x	0.1x	0.1x
Ormat Technologies, Inc.	NYSE:ORA	2.1x	1.8x	3.5%	3.8%	29.5%	2.1x	11.8x	5.1x	2.8x	0.2x	0.2x
Duke Energy Corporation	NYSE:DUK	0.8x	0.3x	3.5%	5.3%	50.8%	2.6x	4.4x	7.7x	4.8x	0.3x	0.2x
NRG Energy, Inc.	NYSE:NRG	1.0x	0.4x	n/a	(49.6%)	57.1%	(4.2x)	58.3x	9.6x	13.8x	18.0x	1.1x
The Southern Company	NYSE:SO	0.7x	0.3x	3.9%	11.4%	42.1%	2.9x	7.5x	10.7x	7.9x	0.3x	0.2x
Algonquin Power & Utilities Corp.	TSX:AQN	0.8x	0.4x	n/a	(0.6%)	50.3%	1.6x	9.4x	5.9x	13.6x	0.2x	0.2x
Atlantica Sustainable Infrastructure plc	NasdaqGS:AY	2.0x	1.8x	n/a	(0.3%)	65.9%	0.8x	0.0x	5.1x	0.0x	1.3x	0.1x
Observations		13	13	9	13	13	13	10	13	13	13	13
Maximum		2.1x	1.9x	*5.1%*	*35.6%*	*67.8%*	3.5x	58.3x	10.7x	13.8x	18.0x	1.1x
Upper Quartile		1.5x	1.2x	*3.9%*	*17.8%*	*57.1%*	2.6x	12.5x	8.3x	4.8x	0.3x	0.2x
Mean		1.2x	0.9x	*3.3%*	*6.6%*	*48.2%*	1.4x	18.0x	6.6x	4.4x	1.7x	0.2x
Median		1.0x	0.8x	*3.5%*	*5.3%*	*48.8%*	1.6x	10.5x	5.9x	2.3x	0.2x	0.2x
Lower Quartile		0.8x	0.4x	*2.5%*	*(0.3%)*	*42.1%*	0.9x	8.0x	5.1x	1.6x	0.2x	0.1x
Minimum		0.3x	0.3x	*1.4%*	*(49.6%)*	*24.6%*	(4.2x)	0.0x	3.3x	0.0x	0.1x	0.1x

Notes:
[1] Excluding the impact of operating lease liabilities and right-of-use assets.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes
Guideline Public Company Business Descriptions
As of July 1, 2023

Workpaper 3

Source: S&P Capital IQ

Boralex Inc. (TSX:BLX)
Primary Industry: Renewable Electricity
Boralex Inc., together with its subsidiaries, engages in the development, construction, and operation of renewable energy power facilities in Canada, France, the United States, and the United Kingdom. It generates electricity from wind, solar, and hydroelectric resources. As of December 31, 2023, the company operates 100 wind farms; 12 solar energy facilities; 15 hydroelectric power stations; and 2 storage units with an installed capacity of 1,819 megawatts (MW) in North America and 1,259 MW in Europe. Boralex Inc. was incorporated in 1982 and is headquartered in Kingsey Falls, Canada.

Brookfield Renewable Corporation (TSX:BEPC)
Primary Industry: Renewable Electricity
Brookfield Renewable Corporation owns and operates a portfolio of renewable power and sustainable solution assets primarily in the United States, Europe, Colombia, and Brazil. It operates hydroelectric, wind, solar, and distributed energy and sustainable solutions with an installed capacity of approximately 19,161 megawatts. The company was incorporated in 2019 and is headquartered in New York, New York. Brookfield Renewable Corporation operates as a subsidiary of Brookfield BRP Holdings (Canada) Inc.

Clearway Energy, Inc. (NYSE:CWEN.A)
Primary Industry: Renewable Electricity
Clearway Energy, Inc. operates in the renewable energy business in the United States. The company operates through Conventional and Renewables segments. It has approximately 6,000 net MW of installed wind, solar, and energy generation projects; and approximately 2,500 net MW of natural gas-fired generation facilities. The company was formerly known as NRG Yield, Inc. and changed its name to Clearway Energy, Inc. in August 2018. Clearway Energy, Inc. was incorporated in 2012 and is based in Princeton, New Jersey. Clearway Energy, Inc. operates as a subsidiary of Clearway Energy Group LLC.

Innergex Renewable Energy Inc. (TSX:INE)
Primary Industry: Renewable Electricity
Innergex Renewable Energy Inc. operates as an independent renewable power producer in Canada, the United States, France, and Chile. It acquires, owns, develops, and operates renewable power-generating and energy storage facilities primarily in hydroelectric, wind, and solar power sectors. The company operates through three segments: Hydroelectric Power Generation, Wind Power Generation, and Solar Power Generation. As of February 21, 2024, it owned and operated 87 facilities with a net installed capacity of 3,600 megawatts, including 41 hydroelectric facilities, 35 wind facilities, 9 solar facilities, and 2 battery energy storage facilities. The company is headquartered in Longueuil, Canada.

Northland Power Inc. (TSX:NPI)
Primary Industry: Renewable Electricity
Northland Power Inc., an independent power producer, develops, builds, owns, and operates clean and green power projects in Canada, Netherlands, Germany, Spain, Colombia, and internationally. The company produces electricity from renewable resources, such as wind and solar, as well as natural gas for sale under power purchase agreements and other revenue arrangements. It owned or had an economic interest 3.4 gigawatts of operating generating capacity. The company was founded in 1987 and is headquartered in Toronto, Canada.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Workpaper 3**
Guideline Public Company Business Descriptions — **Page 2 of 3**
As of July 1, 2023 — *Source: S&P Capital IQ*

TransAlta Corporation (TSX:TA)

Primary Industry: Independent Power Producers and Energy Traders

TransAlta Corporation engages in the development, production, and sale of electric energy. It operates through Hydro, Wind and Solar, Gas, Energy Transition, and Energy Marketing segments. The Hydro segment holds interest of approximately 922 megawatts (MW) of owned hydroelectric generating capacity located in Alberta, British Columbia, and Ontario. The Wind and Solar segment has a net ownership interest of approximately 2,057 MW of owned wind and solar electrical-generating capacity, as well as battery storage facilities located in Alberta, Ontario, New Brunswick, and Québec in Canada; the states of Massachusetts, Minnesota, New Hampshire, North Carolina, Pennsylvania, Washington, and Wyoming in the United States; and the state of Western Australia. The Gas segment has a net ownership interest of approximately 2,775 MW of owned gas electrical-generating capacity, and facilities located in Alberta, Ontario, Michigan, and the state of Western Australia. The Energy Transition segment has a net ownership interest of approximately 671 MW of owned coal electrical-generating capacity, as well as operates the Skookumchuck hydro facility in Centralia; and engages in the highvale mine and the mine reclamation activities. The Energy Marketing segment is involved in the trading of power, natural gas, and environmental products. It serves customers in various industry segments, including commercial real estate, municipal, manufacturing, industrial, hospitality, finance, and oil and gas. TransAlta Corporation was founded in 1909 and is headquartered in Calgary, Canada.

NextEra Energy Partners, LP (NYSE:NEP)

Primary Industry: Renewable Electricity

NextEra Energy Partners, LP acquires, owns, and manages contracted clean energy projects in the United States. It owns a portfolio of contracted renewable generation assets consisting of wind, solar, and battery storage projects. The company owns contracted natural gas pipeline assets. NextEra Energy Partners, LP was incorporated in 2014 and is based in Juno Beach, Florida.

Ormat Technologies, Inc. (NYSE:ORA)

Primary Industry: Renewable Electricity

Ormat Technologies, Inc. engages in the geothermal and recovered energy power business in the United States, Indonesia, Kenya, Turkey, Chile, Guatemala, Guadeloupe, New Zealand, Honduras, and internationally. It operates in three segments: Electricity, Product, and Energy Storage. The Electricity segment develops, builds, owns, and operates geothermal, solar photovoltaic, and recovered energy-based power plants; and sells electricity. The Product segment designs, manufactures, and sells equipment for geothermal and recovered energy-based electricity generation; and provides services relating to the engineering, procurement, construction, operation, and maintenance of geothermal and recovered energy-based power plants. This segment serves contractors; and owners and operators of interstate natural gas pipelines, gas processing plants, and cement plants, as well as companies in other energy-intensive industrial processes. The Energy Storage segment offers battery energy storage systems and related services. Ormat Technologies, Inc. was founded in 1965 and is headquartered in Reno, Nevada.

Duke Energy Corporation (NYSE:DUK)

Primary Industry: Electric Utilities

Duke Energy Corporation, together with its subsidiaries, operates as an energy company in the United States. It operates through two segments: Electric Utilities and Infrastructure (EU&I), and Gas Utilities and Infrastructure (GU&I). The EU&I segment generates, transmits, distributes, and sells electricity in the Carolinas, Florida, and the Midwest. It generates electricity through coal, hydroelectric, natural gas, oil, solar and wind sources, renewables, and nuclear fuel. This segment also engages in the wholesale of electricity to municipalities, electric cooperative utilities, and load-serving entities. The GU&I segment distributes natural gas to residential, commercial, industrial, and power generation natural gas customers; and invests in pipeline transmission projects, renewable natural gas projects, and natural gas storage facilities. The company was formerly known as Duke Energy Holding Corp. and changed its name to Duke Energy Corporation in April 2006. Duke Energy Corporation was founded in 1904 and is headquartered in Charlotte, North Carolina.

NRG Energy, Inc. (NYSE:NRG)

Primary Industry: Electric Utilities

NRG Energy, Inc., together with its subsidiaries, operates as an energy and home services company in the United States and Canada. It operates through Texas; East; West/Services/Other; Vivint Smart Home; and Corporate Activities segments. The company produces and sells electricity generated using coal, oil, solar, and battery storage; natural gas; and a cloud-based home platform, including hardware, software, sales, installation, customer service, technical support, and professional monitoring solutions. It offers retail electricity and energy management, line and surge protection products, HVAC installation, repair and maintenance, home protection products, carbon offsets, back-up power stations, portable power, portable solar, and portable lighting; retail services comprising demand response, commodity sales, energy efficiency, and energy management solutions; and system power, distributed generation, renewable and low-carbon products, carbon management and specialty services, backup generation, storage and distributed solar, and energy advisory services. In addition, the company trades in power, natural gas, and related commodities; environmental products; weather products; and financial products, including forwards, futures, options, and swaps. It offers its products and services under the NRG, Reliant, Direct Energy, Green Mountain Energy, and Vivint. It serves residential, commercial, government, industrial, and wholesale customers. NRG Energy, Inc. was founded in 1989 and is headquartered in Houston, Texas.

Townsite Solar, LLC

Valuation of Townsite Solar Generation Facility for Tax Reporting Purposes — **Workpaper 3**
Guideline Public Company Business Descriptions — **Page 3 of 3**
As of July 1, 2023 — *Source: S&P Capital IQ*

The Southern Company (NYSE:SO)
Primary Industry: Electric Utilities
The Southern Company, through its subsidiaries, engages in the generation, transmission, and distribution of electricity. The company also develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects and sells electricity in the wholesale market; and distributes natural gas in Illinois, Georgia, Virginia, and Tennessee, as well as provides gas marketing services, gas distribution operations, and gas pipeline investments operations. In addition, it owns and operates nuclear, coal, hydro, cogeneration, solar, wind, battery storage, and fuel cell facilities. Further, the constructs, operates, and maintains approximately 77,900 miles of natural gas pipelines and 14 storage facilities with total capacity of 157 Bcf to provide natural gas to residential, commercial, and industrial customers. The company serves approximately 8.9 million electric and gas utility customers. Further, it develops distributed energy and resilience solutions; deploys microgrids for commercial, industrial, governmental, and utility customers; and offers digital wireless communications and fiber optics services. The Southern Company was incorporated in 1945 and is headquartered in Atlanta, Georgia.

Algonquin Power & Utilities Corp. (TSX:AQN)
Primary Industry: Multi-Utilities
Algonquin Power & Utilities Corp. operates in the power and utility industries in the United States, Canada, and other regions. The company operates in two segments, Regulated Services Group and Renewable Energy Group. The company primarily owns and operates a regulated electric, water distribution and wastewater collection, and natural gas utility systems and transmission operations. As of December 31, 2023, it provided distribution services to approximately 1,256,000 customer connections in the electric (approximately 309,000 customer connections), water and wastewater (approximately 572,000 customer connections), and natural gas sectors (approximately 375,000 customer connections). The company's electrical distribution utility systems and related transmission and generation assets are located in the states of Arkansas, California, Kansas, Missouri, Nevada, New Hampshire, and Oklahoma, and in Bermuda. Its regulated water distribution and wastewater collection utility systems are located in the states of Arizona, Arkansas, California, Illinois, Missouri, New York and Texas, and in Chile. The company's regulated natural gas distribution utility systems located in the province of New Brunswick and the states of Georgia, Illinois, Iowa, Massachusetts, Missouri, New Hampshire and New York. It also owns and operates generating assets with a gross capacity of approximately 2.0 gigawatt (GW) and has investments in generating assets with approximately 0.3 GW of net generation capacity. The company generates and sells electrical energy, capacity, ancillary products, and renewable attributes produced by its renewable and clean power generation facilities. It has economic interests in hydroelectric, wind, solar, renewable natural gas, and thermal facilities. As of December 31, 2023, it had a combined net generating capacity attributable to the Renewable Energy Group of approximately 2.7 GW. The company was incorporated in 1988 and is headquartered in Oakville, Canada.

Atlantica Sustainable Infrastructure plc (NasdaqGS:AY)
Primary Industry: Renewable Electricity
Atlantica Sustainable Infrastructure plc owns, manages, and invests in renewable energy, storage, natural gas and heat, electric transmission lines, and water assets in North America, South America, Europe, the Middle East, and Africa. The company was formerly known as Atlantica Yield plc and changed its name to Atlantica Sustainable Infrastructure plc in May 2020. Atlantica Sustainable Infrastructure plc was incorporated in 2013 and is based in Brentford, the United Kingdom.

KPMG

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PETITION 494: TOWNSITE SOLAR/AREVON LLC

Parcel Number(s): 230-123
Petitioner Duly Sworn: James Bergstrom
Document(s) Submitted: *See Attached*

DISCUSSION:

TERRY FARR
Next case is 494 Townsite Solar. Sir, I see you have another case after that. Are we hearing these together or separate?

JAMES BERGSTROM
I would like to hear them together, they're the same.

TERRY FARR
Well, we'll wait on the Assessor until they get prepared. Please state your name and address for the record, sir.

JAMES BERGSTROM
James Bergstrom. The address is 13316 U.S. Highway 95, Boulder City.

TERRY FARR
Was that Bergstrom? B-E-R-G-S-T-R-O-M?

JAMES BERGSTROM
Yes. B-E-R-G-S-T-R-O-M.

TERRY FARR
Thank you. Ms. Mills.

AMY MILLS
Amy Mills with the Clark County Assessor's Office Case 494 is an appeal for account number 230123 for the personal property of Townsite Solar for the 2023 fiscal year. Case 494 begins on master book page 6183 and addendum, page 415. Town Site Solar is a photovoltaic solar array with a faceplate value of 232 megawatts DC, 193 megawatts AC, and with 90 megawatts AC of battery storage. It is located on over 1,000 acres west and south of the Boulder City Airport. The Assessor's Office recommends holding value at $444,616,613.

TERRY FARR
Mr. Bergstrom.

JAMES BERGSTROM
I've got just a few things to put onto the record. So, the principal issue here.

TERRY FARR
Can you pull the microphone closer to your mouth, sir?

JAMES BERGSTROM
Yes, sorry.

TERRY FARR
Thank you.

JAMES BERGSTROM
So, the principal issue here is when a solar field is developed, we get what's called an investment tax credit, an ITC, and this is essentially a 30% refund on the value of the property that we install, and we get this through the form of a tax credit that reduces our federal tax liability. Currently, what the State or the County is using to value us is the full cost to build, the initial cost. Our position is essentially that the actual value of the property should be reduced by the 30% because there's a few different reasons, but basically, no buyer would buy it from us at that cost the day after we get the credit because they wouldn't be able to get the credit. So, they would essentially be able to build the facility the next day for the amount we spent less the 30% we'd get back.

And so, I referenced this, a similar case. Now the County has informed me that you guys can't assert that it's not precedent, but this idea has been heard by other counties and it was appealed to the State and they agreed with the concept that this, essentially, is some type of an obsolescence or a reduction in value because we wouldn't be able, no one else can use that, it's basically exhausted. And I guess that's pretty much my entire position.

Actually, in those attachments. So, I gave an example with a car, which would be a similar concept. If you went and bought an electric vehicle today, you pay full cash value, you'd get a refund. If you turned around the next day and tried to sell that car, no one's going to give you what you paid for it because they'd be able to go buy a brand new one. Same concept.

Additionally, we did a discounted cash flow analysis for the two years in question. They actually lead to an even a lower value than what we're saying, but basically, it's a way to demonstrate that there's clearly some loss value there. 30%, see it feels like the right amount. That's what you would expect it to be reduced, so that's how we came to the, we believe that's the best measure of how much the reduction should be. And that's it.

TERRY FARR
Ms. Mills, I asked the petitioner about combining cases. Is that something the Assessor's Office might want to do?

DAVID DENMAN
David Denman with the Clark County Assessor's Office. These are two separate fiscal years. We have no reason not to combine them. Ones from fiscal year 2022-2023, the other from fiscal year 2021-2022. Would you prefer us to do them separately and just incorporate our testimony?

TERRY FARR
Yeah, I guess we can do that. That way we don't have to repeat ourselves.

DAVID DENMAN
Our testimony's going to be the same from the Assessor's position.

TERRY FARR
Okay, Ms. Weidner, do you have something?

MARY ANN WEIDNER
No, that's fine. However, the Board, whatever the preference of the Board, the difference is the values will be distinctively different. So, you could take a vote, but you'd have to vote on two different values. They're not the same values for each year, but if the arguments are the same.

TERRY FARR
Very well, Ms. Mills.

AMY MILLS
Amy Mills, Clark County Assessor's Office. The valuation of the personal property for Townsite Solar was calculated as directed according to the personal property manual using the taxpayer's reported acquisition year and costs. On page 420 of the addendum, you can see the declaration where the total reported acquisition costs of the equipment and fixtures was $531,238,486. As directed by the personal property manual, the 30-year life table was utilized for an electric power generating utility. If you would turn to page 421 in the addendum, you will see that after applying the cost index and percent good per the personal property manual, we arrived at a total taxable value of $498,992,310 for the 2022-2023 fiscal year. Based on an analysis of market-based data within the Berkeley lab study, it was determined that the calculated taxable value does exceed full cash value. Obsolescence was calculated and applied to reduce the taxable value to $444,646,613.

The appellant is asking for a 30% reduction in reported costs due to a federal investment tax credit and the decision from the Humboldt County State Board case. The Humboldt case does not set precedence for this case as that decision was only valid for that year. Additionally, the investment tax credit is not a purchase discount or an indicator of personal property value. It is simply a reduction of federal tax liability. We'll be discussing this in more detail, including the DA's opinion of legal concerns, the defining of an investment tax credit, accounting, and valuation issues.

Every document that is referenced in this case that has not been brought to your specific attention has been included in the miscellaneous information section of this case. And now Lisa Logsdon from the DA's office will address the legal concern.

LISA LOGSDON
Thank you. Lisa Logsdon, County Counsel for Clark County. You can find the DA opinion that has been issued based on questions that the Assessor's Office had on this on page 422 of your addendum.

So, some of the questions that arose in reviewing this case for the Assessor's Office was is the decision in the Humboldt County v. Battle Mountain is that binding on this Board? And so, as you guys are aware, your decisions are based year by year, and so those decisions are not binding on future assessment years. There has not been a Nevada Supreme Court decision on this case. It is pending at the Nevada Supreme Court, but there is not any legal binding opinion that federal tax credits must be used to reduce value.

The second part of that is does Nevada law even allow such a reduction based solely on federal investment taxes? And the DA's opinion is that Nevada law does not allow for that reduction. As you guys are aware, NRS 361.227 subsection 4 requires that assess value for personal property be determined by taking the cost of replacement minus all applicable depreciation and obsolescence. There's no statute regulation that you can just take a tax investment credit and reduce that. So that, based on that and based on how property is valued in Nevada, that does not, in my opinion, is not a valid reason for reduction. There's no evidence to support that in Nevada law.

And then if you go on to test that value, you guys know you look at comparable sales, you look at a summation of the full cash value of land and contributory value of the improvements or you can use the discounted cash flow. And so again, the investment tax credits don't factor into any of those conclusions.

And then lastly, Nevada law, they've addressed Renewable Energy Tax Abatements in NRS 701A.370, which permits renewable energy projects to get a 55% reduction of property taxes. So, they provided that abatement on the back end, and so to provide an additional 30% reduction off the value is almost a double abatement and not permitted under the law. Even in NRS 701A. 370, it basically states that if you're getting any other type of tax abatement or exclusion, you're not entitled to the 55% reduction. I guess you can get on the front end or the back end, but you can't have both, is the way that the interpretation is how the law and the tax abatement is written.

A few other states have looked at this. In Arizona, there is a statute directly on point that federal tax credits are considered in value. Nevada doesn't have that. They've looked at this in California, as well, in the eighties, and in May Department Stores versus Los Angeles County, they found that federal investment tax credits should not be considered when determining the full cash value of the company's furniture and equipment. Similar analysis here. And so that's the summary of the legal opinion. If you guys have any questions, I'm happy to answer them.

TERRY FARR
Thank you.

LISA LOGSDON
And I'd like to turn it over to Tom here, now, to go through the assessment piece of it.

TERRY FARR
Mr. Walusek, yes, we actually do need you to turn your microphone on even though it's redundant.

THOMAS WALUSEK
Yes, yes, yes. Even though my voice carries. We'll do it with the microphone away. Thomas Walusek. W-A-L-U-S-E-K for the Clark County Assessor. Let's take a minute and define the Investment Tax Credit, or ITC, as it's known as it is, not as some would like it to be. Some history on this. She mentioned 1980. This tax credit goes back actually back to the Energy Act of 1978. After seven additional revisions, it was codified in the Energy Policy Act of 2005 under George Bush, and another seven modifications over the years, and it's now in its current form, which was spelled out in the Inflation Relation Act of 2022. Currently, at this point, well, over time, the ITC has changed in terms of the amount of credit from 10 to 30%. Currently, it's at 30%, and over the next five years actually, it'll be phased out and will be zero by 2030 or 2031.

So, let's find out what we understand about the Federal Investment Tax Credit. NAC 361.326. Investment Tax Credit means a federal income tax incentive intended to encourage capital investment. It's a permanent forgiveness of income tax liability through the direct reduction of tax liability for the year in which it's utilized. The amount of tax credit has varied but is a percentage of the investment in the qualified plant with limits for the amount of taxation, tax reduction, including carry back and carry forward features. And we'll get into that little bit of minutiae later on along that line.

So, what is it? What does it do? It's used by the federal government to incentivize economic activity. In this particular case since 1978, almost universally, various forms of renewable energy, currently, any form of renewable energy along the line. It is an incentive. What does it incentivize? Incentive to finance, it encourages funding. In essence, what it does is it gives, in this particular, it's the funder, a 30% guaranteed return of their investment on their properties. That's a hefty encouragement along that line.

The ITC reduces federal income tax liability only, not state and local property taxes or value. It's disassociated from that.

What is it not? The ITC is not a purchase discount. You can't take it to the register and reduce your cost of goods, not least of all, because you'd need a time machine to travel back in time to do it. ITC does not alter replacement cost new of an asset. After exhausting, it does not change your RCN, for insurance purposes, and based on how you take it, it may or may not even reduce your net book value. Its benefit can be amortized over time, or as the life of the investment, or taken all at once. Most people do the second option. Based on ACS, which is County standard's codification 740.10.25.46. You could do this as what they call a flow through or deferred method. Flow through just means literally the minute you turn on your system, you qualify for the ITC along that line. Deferred method means you take that, and you'd spread it over the lifetime of the asset while you'll also be adjusting your book value at that time.

Now we'll have somebody else who, I'll pass the baton to David Denman, our personal property manager, who gets to be more directly to the County on this federal investment tax credit.

DAVID DENMAN
David Denman with the Clark Assessor's Office. Basically, what the petitioner is asking the Board to do is take a 30% made up number by a congressional committee that was designed to incentivize a group of businesses and industry, in this case renewable energy, to build renewable energy facilities by giving them a reduction, a dollar-for-dollar reduction of their federal income taxes. Nowhere in the revenue code does it mention that this sets value or that it is a reduction to state and local taxes.

We, in the Assessor's Office, went and looked forward to determine if maybe there was obsolescence in the market. One of the things we looked at was the Berkeley lab study. We took that market data and developed what we thought equated to a reasonable estimate of what our value should be to keep it below full cash value. And that obsolescence has been applied to both these accounts in both years. But to go further, we wanted to check and see if we could find any indicators that might give us some comfort that we were not exceeding full cash value. There's not a lot in the market. These places aren't selling for whatever reason. So, what we did is we looked at their financials, their balance sheets, and their income tax returns.

There's a thing in accounting called an impairment. An impairment is when you have a permanent reduction in value of an asset below its net book value represented by the market or a discounted cash flow study. Our taxable values with obsolescence included, as far as we can tell, are below their net book values in either of these two years. So, we're presuming that based on that, the obsolescence we've applied does not exceed full cash value.

Further, if you look at the petitioner's exhibit one, it's subsection 5 of NRS 361.227. I would argue that the 30% investment tax credit does not meet one of the conditions for establishing full cash value. It's not a comparative sales analysis. It's not a summation of the estimated full cash value of the land and contributory value of the improvements. In this case, the land is leased from the government and it's not a capitalization of the fair economic income expectancy or fair economic rent. So, it's our position that the petitioner hasn't given us anything to establish that we're exceeding their full cash value based on all the information we can find. And I'll return it back over to Mr. Walusek.

THOMAS WALUSEK
Thomas Walusek for the record. Let's cover some of the valuation issues associated with the ITC. Granted, this is entirely conceptual. I wish we had a ton of math to throw at you, so you'd have to work through it, but it doesn't work that way. We just have to deal with the building blocks of what this value might

consider. The ITC itself as a tax liability reducer doesn't determine value. Cost minus the ITC does not establish full cash value. Markets set that. In fact, when they purchased the property at $531 million, that was the full cash value on the date of their purchase. Neither the cost nor the ITC determines value. It does influence it, but not in a dollar-for-dollar manner. And that really goes back to appraisal 101. We can't put in a pool for $50,000 that may or may not influence the value of your house on a dollar-for-dollar basis.

The ITC operates in an interesting way, similarly to makers or modified accelerated cost reduction system. Recovery system, excuse me, depreciation for the federal government. It's a non-cash expense to reduce federal tax liability. Nobody reduces the value of the property because it's been fully depreciated based upon MACRS (Modified Accelerated Cost Recovery System). After the tax liability has been determined, then the ITC is applied to reduce the federal tax liability and that is dollar for dollar. Now, the value of that dollar may depend on the position of that particular investor at that particular time. Another reason why we don't do that, so depreciation estimates or costs are against cost for recovery purposes, and ITCs are against federal tax dollars regardless of the source. This was never designed or intended to reduce value and as a flow through, doesn't even reduce book basis.

One of the things that's an example, and show of hands, how many people have done LIHTC (Low-Income Housing Tax Credit) property? How many? How many people have done LIHTC apartments? Okay. Well, there's a program out there that it basically stimulates the investment into low-income housing, low-income housing tax credit. And what that does is it gets quite complicated, but for right now, let's just you the example of it's called a 40/60, and that is if you have 40% of your units at 60% or less of median income, they will allow you to have a 9% tax credit for the developer. Now, in that particular scenario, the lenders want usually a value, an unrestricted and restricted, so that's-

DAVID DENMAN
Slow down.

THOMAS WALUSEK
Oh, slow down. All right. Nobody's complaining.

TERRY FARR
And maybe pull the microphone a little closer, please.

THOMAS WALUSEK
I will be happy to do that. But after the development of value in the restricted case, nobody takes the 9% that they're getting from the federal tax credit and reducing the value of the property. It's entirely inappropriate to do that. Now, I had some fun with this, so bear with me, but if you can go to page, on the addendum of 426, I created a little graphic that I wanted you to see because I think it kind of simulates why we're really at odds conceptually with this whole concept. Basically, what this is, I call it the utility scale solar business path, and it shows over time what happens when you're developing one of these solar farms. So, first you have to conceive, and you plan the development. In about six months or so, let's just say you acquire the power purchase agreement. That's really what underwrites the developments of these things.

Then you secure funding and about another three months later you start buying equipment and you start amassing them so you can install it. I call that, the cost of equipment, I call it the number of apples you got in your basket. That's the equipment you've actually purchased on this. Twelve months later you've installed the equipment. It could be 12 to 18, but let's just say 12 for this example, and you turn it on. Now you've got revenue. Now you've got expenses. You're going to come down to some kind of either

NOI (Net Operating Income) or typically EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization). We treat this more as a going concern along that line. After that's done, then you actually subtract your application of your modified accelerated cost recovery system numbers on this. These are non-cash expenses, but it does affect what your NOI or your EBITDA was. EBITDA was at that particular time.

What does it do? Reduces your federal tax liability of the business. Now we have another opportunity. Now we can take our federal tax investment credit, and we want to subtract that as well. The only relationship this has the cost is because that's what's used to create the 30% of watt and they take 30% of the cost along that line. We call that your bananas. Lots of bananas and they can be a lot of different - he's smiling. A lot of different kinds of places along the line. What is it you do? You subtract that out and that reduces your federal tax liability of the businesses and not necessarily even this entity because this tax credit can flow through associated entities. We send out a notice of value. The appellant sends back an appellate claiming that if we subtract the bananas from the apples that they purchased two years ago, then there are less apples.

We just don't see eye to eye on that at all. In effect, some investor took the federal tax credit and reduced their federal tax liability on any number of investments, presumably anywhere in this country. So, I ask you, how does that reduce the intrinsic contribution value of the equipment of this property? We don't see the connection. My answer to that is it does not. I know of no statutory alchemy that allows us to transmute this amorphous variable value on the taxes to the actual replacement cost new of the equipment. I don't see that or any other pot of gold that you're going to find there. So, to conclude this example, if you follow this logic to its absurdly illogical conclusion, what the appellant is arguing is that if the federal government decided tomorrow to give a 100% investment tax credit, then all of their equipment, all of the $531 million sitting in the desert, pumping out energy for the next 30 years wouldn't have any value at all.

I don't buy that, and you shouldn't buy it either. In conclusion, we don't recognize the federal investment tax credit as a dollar-for-dollar reduction of replacement costs new. We agree with the District Attorney that there is no basis in Nevada law or equity that supports the use of the federal investment tax credit. We do not consider in the current appeal that the appellant has passed the burden of proof that our fully appreciated estimate of taxable value exceeds the full cash value of the property. Therefore, we recommend no changes to the fully depreciated estimate of taxable value of $444,646,613 for the year 2022/2023, and the estimate of the taxable value of $504,676,562 for the year of 2021/2022.

Our estimate of fully depreciated replacement cost new is based on over 1,100 solar farms. We feel very, very comfortable with that until we see evidence that would suggest that we need to readdress this, we're going to hold pat. We strongly recommend the Board of Equalization does not strip the appellant of their rights under the Renewable Energy Tax Abatement Program as this will greatly increase their tax liability.

I have no idea also of how they would reapply or if that reapply application would be accepted. So, that's an important point. Anyway, that concludes our presentation, but I'm happy to answer any questions you may have.

TERRY FARR
Mr. Bergstrom, any rebuttal?

JAMES BERGSTROM
Absolutely. So, I think I actually love the 100% ITC example. If we got to buy all this equipment, put it out in the field and the government gave us all our money back, nobody would buy that equipment from us would pay us anything because they too would be able to go out, buy it themselves and the government would give them all their money back. Basically, it is an immediate reduction in the value of it because anyone else can get this credit. Additionally, I think that actually proves my point pretty well that it would have no value if we didn't have to pay anything for it because that's essentially what it would be.

Additionally, as far as replacement cost is concerned, if that entire field burned down tomorrow and we had to rebuild it, we would get the credit again. So, it would reduce our replacement cost by the value of the ITC. And then as far as apples and bananas, it's dollar bills, it's $1 bill, $1 bill. I don't know exactly how you can argue those aren't the same thing. I guess I didn't know about the example with the low-income housing, but my guess would be that you would not consider that credit you get from the government as part of income for your discounted cash flow like that wouldn't end up on your income statement and so basically it would be ignored from a property tax perspective. So, I guess - do you guys have any questions for me?

TERRY FARR
Oh, yes. Number one, anybody on this panel and probably a handful in the audience will tell you I'm a nut about solar. I've been preaching to the choir for seven to eight years. I've been trying to get our real estate agent market to understand it and understand the different ownership. I disagree with your assessment that if it were to Act of God demolish everything you have and that you would replace it. I disagree that you would get the tax incentive again, they've already issued it once. They're not going to. I have a 14-kilowatt system on my house. If my house burns down, I don't get the credit again if I put solar on. It's a one-time thing. It's a one time. Now you might have juice given the size of your system to get some sort of legislative act enabled where I don't, however, that's not looked at on the overall. Secondarily, if anybody were to buy them, they're not buying the panels. They're buying the cash flow that the panels provide. Fair?

JAMES BERGSTROM
Correct.

TERRY FARR
Okay. So, from my perspective, the 30% adjustment is irrelevant to replacement costs. Absolutely irrelevant. If it goes away, you're still going to have to pay, and I had to up my insurance on my house as well. Granted, significantly smaller scale, but the concept is the same, okay? And we as appraisers, when we're doing replacement costs, we're not taking that deduction and replacement costs. They have to ensure the full value of the panels as if they were going to be replaced that day. So, that part of your argument I disagree with, but I'm still more than willing to listen to other opinions from the Board and any questions the Board might have.

JAMES BERGSTROM
Can I respond to that?

TERRY FARR
Sure.

JAMES BERGSTROM
So, I don't know how it works with residential solar, but not only if even 60% of the plant got but destroyed tomorrow, there's a re-power allotment for at least utility-scale solar where we would get the credit again.

TERRY FARR
Any response from the Assessor on that?

THOMAS WALUSEK
(inaudible).

TERRY FARR
You've heard of that, or we know that?

THOMAS WALUSEK
No, I don't know that. I have heard of that. I cannot confirm it. I can't confirm it.

DAVID DENMAN
David Denman with the Clark County Assessor's Office. Can I make a comment?

TERRY FARR
Of course.

DAVID DENMAN
The fact that they could refund it, and they could potentially get the investment tax credit again really in no way affects the value of the property we're discussing. They did not go to their vendor and say, I've got a 30% investment tax credit, reduce the cost of my equipment by 30%. If we're looking out at –

TERRY FARR
Yeah, it wouldn't work out.

DAVID DENMAN
The market, and the only market we can is the new market, right at the moment, they're not getting a reduction of 30% when they go and buy this equipment, and they would expect their insurance companies to pay the full cost to rebuild that facility. So, I don't think the fact that they could potentially re-get an investment tax credit, and it might not be at 30% at that time, by 2030, currently, the investment tax credits supposed to be gone, then it'll be zero. So, if it happened in 2030, there wouldn't be one for them to get unless something changed from what it currently is.

TERRY FARR
Members of the Board. Mr. Walusek.

THOMAS WALUSEK
Pick me. Pick me.

TERRY FARR
I just did. Mr. Walusek.

THOMAS WALUSEK
I think this is an interesting discussion in this one sentence and it's conceptual in the sense that a dollar is a dollar is a dollar. I don't think that's an appropriate analysis. We have a dollar here and tax liability reduction from any number of sources that may have all different kinds of levels of risk and that dollar for that particular purpose may have a specifically greater weight to that investor than for example, that we beat on a couch along that line. That's very different than the cost itself, which is actually just a purchase price number that's been declared by the appellant accurately. That's great. I don't see those as something as a dollar. Those dollars are not the same thing. It's great to say that, pardon me, but that's why we use bananas and the apples because they're different things along that line.

TERRY FARR
Members of the Board.

GLENN ANDERSON
So, the example that we had earlier with the tax credit for low-income housing, oftentimes they could actually sell that credit on an open market. There was a way to transfer that to other parties and people would actually pay for that, but it never changed the value of the property. So, that would get sliced off. It went away and then the value of the property was the value of the property because they agreed for that tax credit to modify their operation. So, the solar company, I mean you're not modifying your operation, right? You're not changing the way you're selling power on the grid because somebody gave you 30%?

JAMES BERGSTROM
It doesn't affect the way we sell.

GLENN ANDERSON
Right. So, it doesn't happen that way. So, it doesn't change the value of the solar field.

JAMES BERGSTROM
It changes how much somebody would pay us. It changes the full cash value. Nobody would pay us the full cash value of what we just spent because they could go build it and get this credit and save and get that money back.

PETRA LATCH
If they build it, then they have to go to the risk of building it. So, I want to just be very kind of simple. Tell me if I'm off here. We're talking about a federal tax credit, does not have a specific dollar amount because it will vary depending on who the investor is, and this is the reason why we do EBITDA. It's before things like taxes and interest and amortization because for each single person it differs. So, I don't know if I'm oversimplifying, but it seems like that is all below the line data and we don't capitalize on that. We don't look at the value of a business or a property based on things below that line.

JAMES BERGSTROM
Right. I'm not saying - I'm saying, what a buyer would buy, an informed buyer. What they would pay us for the facility is substantially less than what we paid to build it. And I believe we're supposed to value based on what the market is, basically what the value would be if we were to sell it.

GLENN ANDERSON
Do you have any examples?

TERRY FARR
I was going to ask; do you have support for that statement?

JAMES BERGSTROM
I don't agree with that. Well, so the problem is these just don't sell. And so, when they say that they are very confident because they've looked at 1,400 solar fields and that they think this is the appropriate value, they don't actually have anything to support that other than a bunch of people guessing. These haven't sold.

PETRA LATCH
They may pay - I'm sorry.

JAMES BERGSTROM
I'm sorry.

TERRY FARR
They haven't sold because they cashflow.

PETRA LATCH
Right. They may pay less because there's depreciation, which I'm assuming you've taken into consideration. They may pay more because income's higher and things that have appreciated. So, I think that I'm not quite seeing that there's support that people will pay less simply because they weren't the first developer who got an incentive for development and all the risk associated with development versus what the asset is right now based on what is there and what income it produces. I don't see any evidence of that.

TERRY FARR
Mr. Walusek.

THOMAS WALUSEK
The appellant makes one - examines or brings up to our review a good condition in the market space and that is out of the 1,249 solar farms that have been reported to date that have been completed, we have no data of any of these ever being brought to market at any kind of a full-length, arm length manner whatsoever. I've talked to people who specialize in power generation plant appraisal. Zero. We've talked to the head of Ernst & Young who has a national footprint, zero. They just don't trade. Now, you can look at this and say maybe they're such horrible investments nobody can possibly unload them, or you can look at it the other way and assume as I do, they're probably cash cows and there's no reason anybody would ever sell them. So, along that line, there's another issue to be added here. We talk about, oh, we're going to reduce the cost here of the equipment.

Well, the $531 million was put on the ground because it needed to be there to produce the energy required to actually underwrite the PPA, the Powered Purchase Agreement. That has intrinsic value. It doesn't just go away along that line. Now the other thing, having said that, because there are some nuances to this, which I simply don't understand, and no one has been able to describe to me. My question is why don't they sell? I'm intending to spend the next couple of months, three months, to figure out what that is. I don't know what it is. It could be great news; it could be bad news. I don't know what it is. All I know is people who own them are really happy and they're not letting loose of them for anything. To translate, the value of the business that would be transacted after part of the business value has been consumed and then equate that to what the intrinsic value of the equipment is that makes the widgets or makes the power, anything like that, a non sequitur.

There is a relationship, I'm not going to sit here and pretend to know what it is, but I know that in terms of our assessment and how that was generated, we didn't do that on sales. In terms of the Berkeley study, what they did is they took information from the Energy Information Agency, and they took the reported install costs of all of these different farms throughout the United States. They identified what cost per watt that was going to be over time. I'm not so particularly concerned about the cost per watt. What I was interested in was the diffing, the difference, the declination in costs over time and clearly the costs to reproduce or replace was far, far less than our double declining balance method of finding depreciation.

So, I knew there was obsolescence in there. By using those two pieces of data, I was able to, in many cases, actually double the deduction that most of the solar farms in this community have because we are now able to say, okay, we've got the wear and tear, which is double declining balance, and now we've got something that we can actually measure in terms of obsolescence, which in this case takes all of the functional obsolescence and market obsolescence into play.

So, in fact, if you look at the actual data unaffected, not manipulated in any way, and you line up the declination of price over there, you end up with a second order in polynomial trend line that's 0.99, like six seven. It's perfect. I've been doing this for 35 years. I almost fell out of my chair. Did it six times to make sure I wasn't making stuff up along that line. I mean as an analyst, I reached into my black hat, I didn't pull out a rabbit, I pull out the Easter Bunny, you can't find this.

So, I'm extremely confident and comfortable with that type of analysis that we have been able to estimate what the fully depreciated RCN of these farms are. The next question is how do you relate that to full cash value? We have found no analysis, including the last one, which the Board agreed with us didn't prove full cash value exceeded. But there are tools and ways that we will be able to get involved in this and over the next couple of months I'm going to do that just because we need to do it for the County as well as the state. But for this particular hearing, we would really recommend that you hold the value we've created.

JAMES BERGSTROM
Can I say one more thing?

TERRY FARR
Members of the Board any - Oh, you have a response. Mr. Bergstrom?

JAMES BERGSTROM
Yeah, if I can. One last thing to consider is, when we finance these projects and we do that based on a Weighted Average Cost of Capital, discounted cash flows, we consider the investment tax credit as a cash outflow from the day we turn it on. So, when we are financing these projects, we recognize that this is coming out on that day and all the cash flows after that are being supplemented by that initial cash flow and so the value is gone, once we receive that credit. So, when you guys talk about the cash flows are so great, in all reality the greatest cash flows on day one and then after that the cash flows aren't that great, but nobody wants to buy them. I guess I don't know if that's the choice. I guess I can't explain why they don't sell either, but if you look at the value of them, that value basically evaporates the day we take that credit, that value is gone. The full cash value of that project is now substantially less.

TERRY FARR
Frankly, I disagree with your statement.

JAMES BERGSTROM
Okay.

TERRY FARR
Members of the Board?

<u>MOTION</u>

GLENN ANDERSON
Can I make a motion?

TERRY FARR
Sure.

GLENN ANDERSON
I don't think we've seen any evidence here today that would indicate that the full cash value that the Assessors' come up with exceeds the full cash value of the solar panels. So, I make a motion that we accept the reduced amount to I think for Case 494. $444,646,613. Was that correct? Correct number?

AMY MILLS
The value was $444,616,613.

GLENN ANDERSON
Okay.

MARY ANN WEIDNER
I think that it was $646,613 and that's for the 2022/2023 fiscal year. And for the 2021/2022 it's $504,676,562.

TERRY FARR
But we're only hearing Case 494 right now.

MARY ANN WEIDNER
Oh, forgive me. I thought you were going to take a vote on both, so no worries

TERRY FARR
I tried. So, for the value for Case 494, where are we at? And Glenn, I think we need you to revise your motion.

DAVID DENMAN
David Denman with the Clark County Assessor's Office. On page 421 of the addendum, we have the adjusted taxable value with obsolescence included. It comes to $444,646,613.

GLENN ANDERSON
I think that's what I said. So that's my motion. We accept that full cash value.

TERRY FARR
Very well. Motions were made. Please cast your votes.

VOTE

VOTING AYE: Terence J. Farr, Luke Adamo, Glenn Anderson, Tami L. Campa, Petra Latch
VOTING NAY: None
ABSENT: None
ABSTAIN: None

TERRY FARR
And that motion passes unanimously. Sir, you do have the right to appeal.

FINAL ACTION:

It was moved by Member Glenn Anderson, and carried by unanimous vote of the members present, to accept the Assessor's recommendation (to reduce the total taxable value from $498,992,310 to $444,646,613 for FY 2022/2023).

PETITION 495: TOWNSITE SOLAR/AREVON LLC

Parcel Number(s):	230-123
Petitioner Duly Sworn:	James Bergstrom
Document(s) Submitted:	*See Attached*

<u>DISCUSSION:</u>

TERRY FARR
Let's just roll right into Case 495. Again, please state your name and address for the record.

JAMES BERGSTROM
James Bergstrom addresses 13316 U.S. Highway 95, South Boulder City.

TERRY FARR
Thank you. I am incorporating any and all testimony and information provided from Case 494 into Case 495. Ms. Mills, will you please introduce the case?

AMY MILLS
Amy Mills, Clark County Assessor's Office. Case 495 is in appeal for account number 230123 for the personal property of Townsite Solar for the 2021/2022 fiscal year, Case 495 begins on master book page 6,206 and addendum page 654. The Assessor's Office recommends holding value at $504,676,562.

TERRY FARR
Mr. Bergstrom. Any other information to provide?

JAMES BERGSTROM
No additional testimony.

TERRY FARR
Very good. Do we want to go through the case? Just reiterating everything we did updating the year?

DAVID DENMAN
David Denman with the Clark County Assessor's Office. We just want to incorporate the testimony from Case 494 in its entirety. That's all we have.

TERRY FARR
Sounds like something I just said a second or two ago.

TAMI CAMPA
Yeah.

<u>MOTION</u>

TERRY FARR
Based on the information provided and the testimony contained here in the previous case, I would motion that the Assessor's value does not exceed full cash value. Please cast your votes. Not to call anybody out but we'll have to wait a moment for Mr. Adamo.

MARY ANN WEIDNER
And Chairman, that is a reduction on the part of the Assessor to $504,676,562.

TERRY FARR
That's equivalent to another 5%, just so you're aware.

VOTE

VOTING AYE:	Terence J. Farr, Luke Adamo, Glenn Anderson, Tami L. Campa, Petra Latch
VOTING NAY:	None
ABSENT:	None
ABSTAIN:	None

TERRY FARR
And that motion passed as well. Sir, you still have the right to appeal. Forms are outside the door. Thank you for your time.

FINAL ACTION:

It was moved by Member Terry Farr, and carried by unanimous vote of the members present, to accept the Assessor's recommendation (to reduce the total taxable value from $531,238,486 to $504,676,562 for FY 2021/2022) as it does not exceed full cash value based on the information provided.

SBE NOTICE OF HEARING

STATE OF NEVADA

STATE BOARD OF EQUALIZATION

JOE LOMBARDO
Governor

3850 Arrowhead Drive, Second Floor
Carson City, Nevada 89706
Telephone (775) 684-2160
Fax (775) 684-2020

SHELLIE HUGHES
Secretary

September 2, 2025

NOTICE OF HEARING

CERTIFIED MAIL – 9489 0090 0027 6613 7919 80
PETITIONER:
TOWNSITE SOLAR AREVON LLC
ATTN: ERIC HUSWICK
8800 N GAINEY CENTER DR., STE 100
SCOTTSDALE, AZ 85258

CERTIFIED MAIL – 9489 0090 0027 6613 7915 84
RESPONDENT:
BRIANA JOHNSON
CLARK COUNTY ASSESSOR
500 S GRAND CENTRAL PARKWAY 2ND FLOOR
LAS VEGAS NV 89155-1401

DATE/ TIME: **September 29, 2025 at 9:30 AM**
September 30, 2025 at 9:00 AM
October 1, 2025 at 9:00 AM

PLACE: **Nevada Department of Taxation**
700 E Warm Springs Road, Room 150
Las Vegas, Nevada 89119

Nevada Department of Taxation
9850 Double R Blvd.
Reno, Nevada 89521

ZOOM OPTION:
https://us02web.zoom.us/j/82951348384
Or Telephone:
US:+1 669 900 9128 or +1 253 215 8782 or +1 346 248 7799 or +1 646 558 8656 or +1 301 715 8592 or +1 312 626 6799
Webinar ID: 829 5134 8384

Hearings begin on the first day. It is each taxpayer's or his representative's responsibility to be present when the case is called.

LEGAL AUTHORITY AND JURISDICTION OF THE STATE BOARD OF EQUALIZATION: NRS 361.400

BRIEF STATEMENT OF MATTER: Appeal from the action of the Clark County Board of Equalization

Case No: **25-139** **Parcel No:** **Account# 230123**

The State Board of Equalization (State Board) will hear the Petitioner's appeal at the time and place stated above. Please be aware that the time is approximate and although you may be assured the appeal will not be heard prior to the stated time, be prepared for possible delays as several appeals are scheduled at the same time. <u>If the taxpayer or his representative is not present when his hearing is called, the State Board will invoke the requirements of NRS 361.385 and NAC 361.708(4). The State Board may (a) proceed with the hearing; (b) dismiss the proceeding with or without prejudice; or (c) recess the hearing for a period to be set by the State Board to enable the party to attend.</u>

Please be aware the State Board will limit its consideration to the issues and contentions set forth in the petition. Other issues may be heard if the requirements of NAC 361.745 are met.

Information regarding the rules of practice and procedure before the State Board are on the attached information sheet.

In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this hearing should notify the Department at least 3 days before the hearing. In order to comply with the security procedures of the Department, you will be required to show identification and sign a visitor's log prior to entering the hearing room.

If you need an accommodation in order to communicate during the hearing, the Department will provide one at no cost to you. Arrangements for an interpreter should be made as soon as possible, but no later than 14 days before the scheduled meeting. Please contact Kari Skalsky at 775-684-2160 at least 14 days in advance to request an interpreter in your preferred language. You may also submit your request through stateboard@tax.state.nv.us.

Si necesita una ayuda para comunicarse durante la audiencia, el Departamento se lo proporcionará sin costo alguno. Los trámites para conseguir un intérprete deben hacerse lo antes posible, pero a más tardar 14 días antes de la cita programada. Por favor, póngase en contacto con Kari Skalsky al 775-684-2160 con al menos 14 días de anticipación para solicitar un intérprete en su idioma de preferencia. También puede solicitarlo a través de stateboard@tax.state.nv.us.

If you have any questions, please call (775) 684-2160.

Shellie Hughes
Secretary to the State Board of Equalization

By: K Skalsky

Kari Skalsky
Management Analyst III, Boards and Commissions
Department of Taxation