



*Engineering Tax Incentives
(R&D + 179D)
and Making the Most of 2020*

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ACEC Louisiana
October 15, 2020



JASON VILLERE, DIRECTOR



Specialization

- R&D Tax Credits

Experience

- 7 years at Engineering Firm
- 5+ years in Consulting

Education

- MBA, Management – *Sam Houston State University*
- BS, Accounting, *Louisiana State University*



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R&D Credits



Payroll Tax Credit



Cost Segregation



179D EECBD



45L Home Credit



Fuel Tax Recovery



Tax Controversy Support



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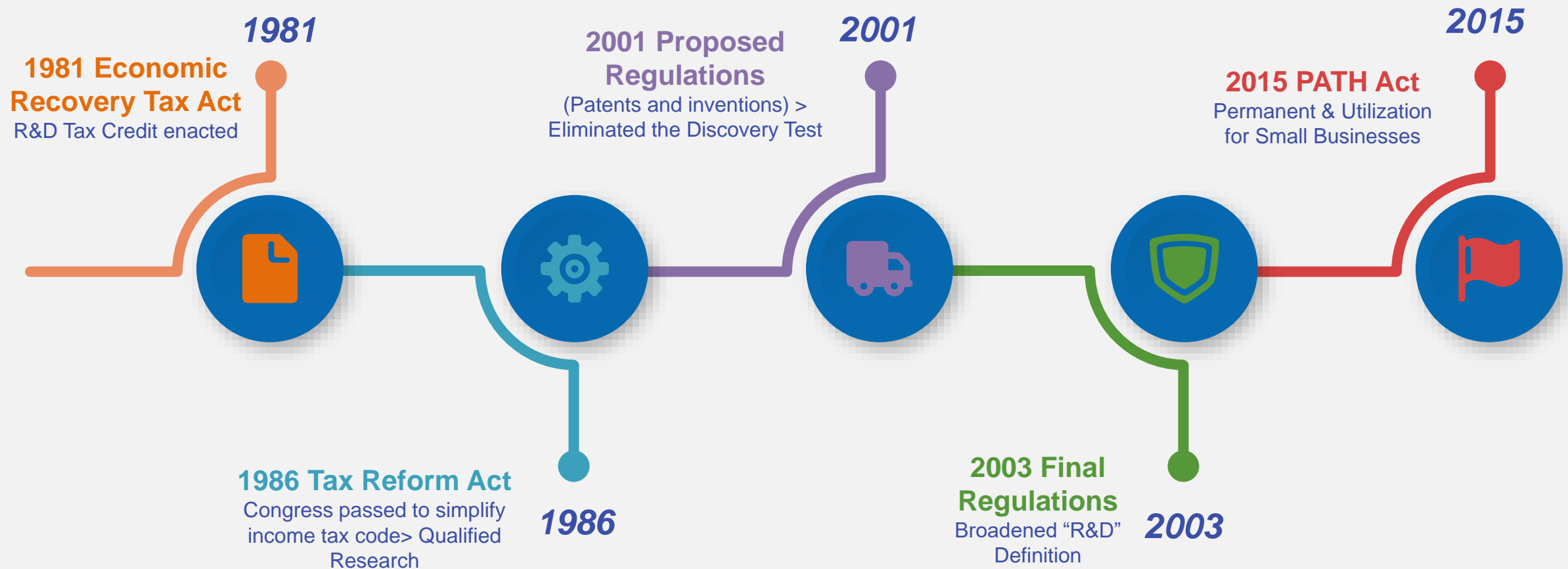
The BRAYNiacs are a team of lawyers, engineers, and CPAs with extensive industry experience.

R&D Tax Credits





The History of the R&D Tax Credit (Sec 41)





R&D Tax Credit Basics

	Federal
Years	<i>Permanent!</i>
Qualification	Qualified Research = 4-Part Test <i>Much broader than traditional definitions of R&D</i>
Eligible Qualified Research Expenses (QREs)	1. Wages <i>W-2 Box 1 Wages and SE Earnings for Partnerships</i> 2. Supplies
Approximate Effective Net Credit	Up to 8% of QREs
Utilization	Generally, RTL minus TMT <i>Exceptions for small businesses</i>
Carryovers	Back 1 year & Forward = 20 years



4-PART TEST FOR R&D QUALIFICATION

THIS IS AN ACTIVITIES-BASED CREDIT!

Business Component

- New or improved
- Product, process, technique, formula
- Purpose: functionality, durability, quality, reliability

Uncertainty

- Capability
- Methodology
- Final or appropriate design

Process of Experimentation

- Systematic evaluation of alternatives
- Trial and error

Technological in Nature

- Engineering, physics, chemistry, biology, or computer science
- Existing principles are OK



EXCLUSIONS

- R&D outside the United States
- R&D after commercial production has started
- Reverse engineering
- Efficiency surveys or marketing activities
- Aesthetic, cosmetic, or seasonal-type design decisions
- Funded Research
 - R&D performed under Time & Materials or Cost-Basis contracts
 - Fixed fee and lump sum contracts generally not excluded



“Funded” Projects

RIGHTS: The taxpayer retains substantial rights in the research. Rights need not be exclusive (a right to use the results of research in the taxpayer’s business is sufficient).

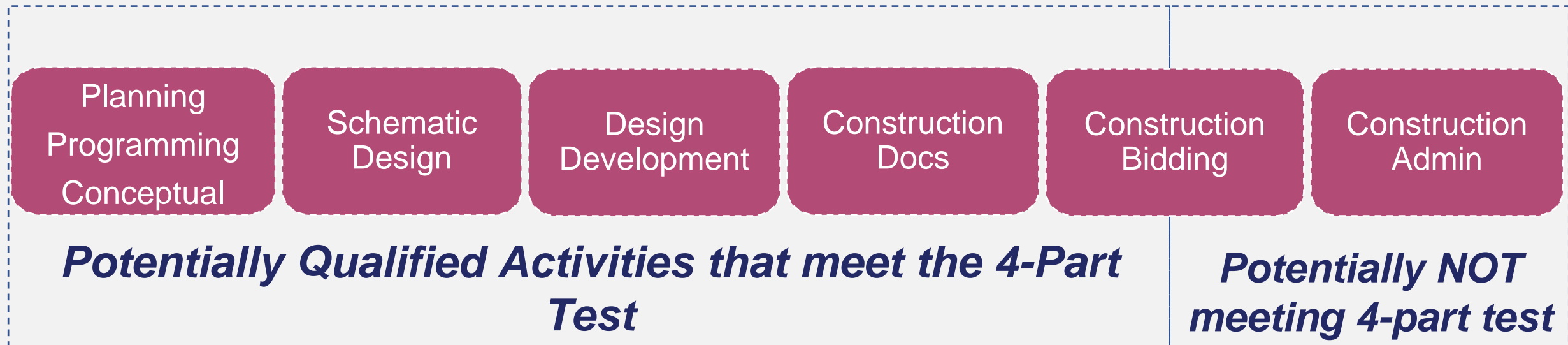
Lockheed Martin Corp. v. United States, 210 F.3d 1366, 1375 (Fed. Cir. 2000). **Populous Holdings, Inc v. Commissioner of Internal Revenue (Docket No. 405-17) (2019)**

ECONOMIC RISK: The amounts payable under the agreement are contingent on the success of the research. Taxpayer must bear the expense or risk thereof even if research is unsuccessful.

Geosyntec Consultants, Inc. v. United States, 9:12-cv-80334 (S.D. Fla. 4/15/13)



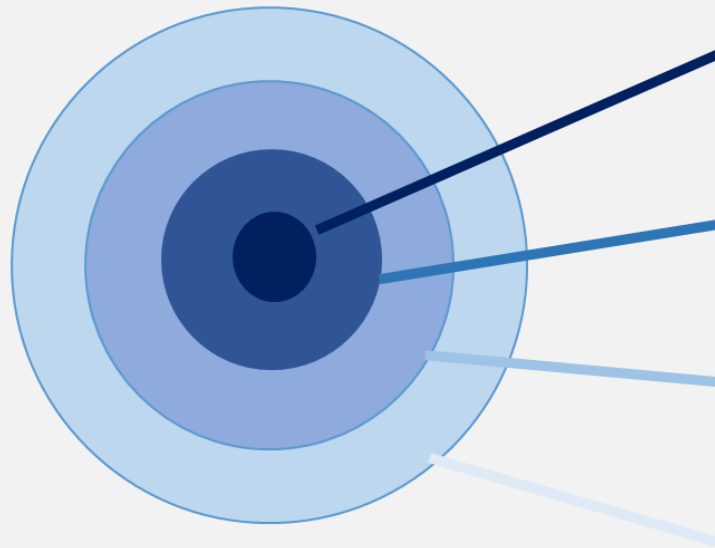
R&D TAX CREDIT FOR ENGINEERING



The R&D Tax Credit includes Direct R&D, Supervision of R&D, and Direct Support of R&D, so it is important to think a level above and a level below to get the full picture of everyone involved in the R&D process.



R&D TAX CREDIT FOR ENGINEERING



EMPLOYEES	Total Time spent on R&D Activities											
	R&D Support			Direct R&D Activities			R&D Supervision					
Architects, Engineers, CAD, BIM, Designers	Light	Light	Light	Dark	Dark	Dark	Light	Light	Light	Light	Light	Light
Partners, Principals, VPs, Dept Heads	Light	Light	Light	Light	Light	Light	Dark	Dark	Dark	Dark	Dark	Dark
Project Managers, QA Engineers	Light	Light	Light	Light	Light	Light	Light	Light	Light	Light	Light	Light
Surveyors, Interior Designers	White	White	White	Light	Light	Light	Light	Light	Light	Light	Light	Light



QUALIFIED RESEARCH EXPENSES

WAGES



- W-2 Wages, Box 1
- Portion of SE Earnings for Partnerships and Schedule C filers
- Claim % based on time spent in qualifying activities

SUPPLIES



- Raw material costs
- Consumables
- Prototype component costs

CONTRACTORS

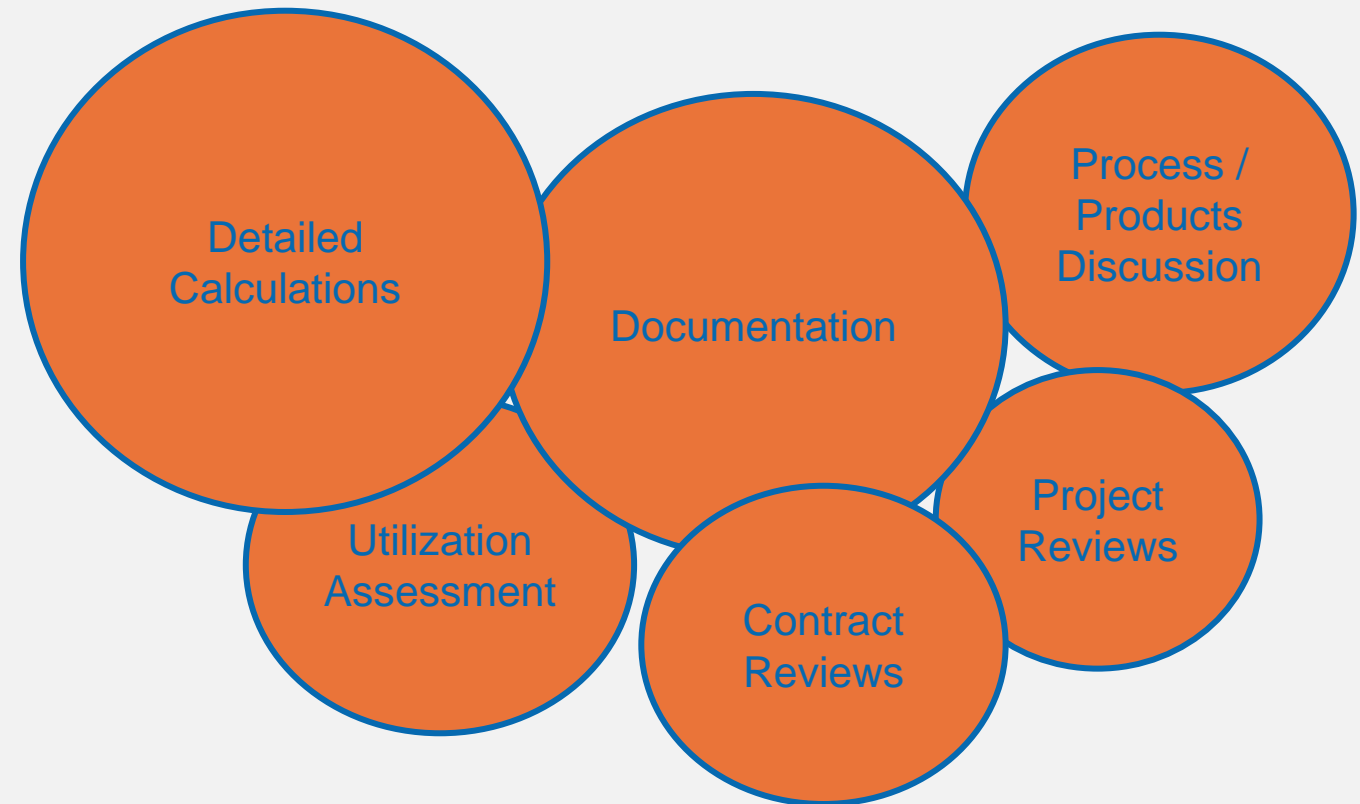


- 65% of amount paid
- Costs related to third-party contractors performing qualifying activities
- Outside consulting, engineers, testing facilities



WHAT IS IN A TYPICAL R&D STUDY?

- Define activities that meet the 4-part test
- Review projects and contracts
- Determine the Qualified Research Expenses
- Perform the calculations
- Provide Documentation





BRAYN'S 3 PHASE PROCESS

Phase 1 Assessment

- No Cost
- Data Request
- Estimated benefits with fixed-fee options

Phase 2 Detailed Calculations

- Detailed study
- Interview and site visit
- Pro-forma computations
- Meeting with CPA, discuss tax filing

Phase 3 Comprehensive Documentation

- Transparent, comprehensive, auditable document
- Meeting to discuss final results



R&D FOR CIVIL ENGINEERING – CASE STUDY

Civil Engineering Services

- Land & Site Development
- Hydraulics & Hydrology
- Surveying

Example Qualified Activities:

- Design & drafting
 - Plan & profiles
 - Grading, Drainage
 - Utilities
- H&H Analysis & Reporting
- Certain survey activities in support of design

Tax Year 2019	Annual Amount
Gross Revenues	\$ 20,000,000
Total Payroll	\$ 11,000,000
Qualified Research Expenses (QREs)	\$ 3,000,000 90% wages 10% contract
Net Federal Credits	\$ 170,000
Employees #	200



R&D FOR ENGINEERING

Example Qualified Activities:

- Sub-System Engineering
- Structural
- HVAC
- Site grading
- Electrical systems
- SD, DD, and CD phases

Item	Average Annual Amount
Number of Employees	50
Total Payroll	\$2,600,000
Qualified Research Expenses (QREs)	\$900,000
FED NET CREDITS	<u>\$50,000</u>



CARES ACT – NOL Changes

- NOLs from 2018-2020 can be carried back 5 previous tax years
- 80% limitation repealed
- **NOLs carried back can open opportunities in closed in tax years such as R&D tax credits**

Recent article: <https://brayn.com/cares-act-revises-nol-rules-and-opens-door-for-unclaimed-rd-tax-credits/>

179D Energy Efficient Commercial Building Deduction



Extended 12/20/2019 for 2018 – 2020 Tax Years



179D ENERGY EFFICIENT INCENTIVE BASICS

FEDERAL TAX DEDUCTION	
FOR BUILDINGS CONSTRUCTED	2006 through 2020
VALUE	<i>Up to \$1.80 per square foot federal tax deduction</i>
QUALIFICATION	<ol style="list-style-type: none">1. Designers / Builders of Govt Owned Buildings2. Commercial Property Owners
ELIGIBLE QUALIFIED PROPERTY	<ul style="list-style-type: none">• HVAC / Hot Water• Interior Lighting• Building Envelope• New Construction• Renovation• Addition
NOTES	<ul style="list-style-type: none">• Subject to federal statute of limitations• Typically available for projects completed prior 3 years• Requires certification by 3rd party Professional Engineer



179D FOR DESIGNERS & BUILDERS

- Architect
- Mechanical Engineer
- Electrical Engineer
- MEP Engineer
- General Contractor
- Mechanical Subcontractor
- Electrical Subcontractor
- Controls Companies
- Specialty Designers/Contractors



GOV'T OWNED BUILDINGS
K-12 Schools
State University Buildings
City, Town, County
Prisons
Airports, Port Authority
State/County Hospitals
Military
General Services Admin (GSA)



ALLOCATION LETTERS

- DESIGNER
- AUTHORIZED REPRESENTATIVE
- PLACED IN SERVICE DATE (CO, CERT. COMPLETION, ETC.)
- IRS & THIRD-PARTY CONTACTS

ALLOCATION LETTERS ARE CRITICAL PATH





CASE STUDY – MEP ENGINEERING FIRM

- 15+ Projects per Year
- New Construction
- Renovations
- Corporate Campuses
- Office
- Universities
- K-12 Schools

Tax Years	Taxable Income	Tax <u>Before</u> CARES Act	Tax <u>After</u> CARES Act
2013-2017	1,000,000	350,000	85,000
2018	(750,000)	-	-
2019	700,000	40,000	210,000
	TOTAL TAX	390,000	295,000



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Completed 2018	Size (SF)	Allocation	Qualification	Tax Deductions
University Bldg	150,000	100%	\$1.80/SF	\$270,000
Middle School	120,000	50%	\$1.80/SF	\$108,000
University Garage	250,000	100%	\$0.60/SF	\$150,000
2018 Tax Deductions				\$ 528,000



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2013-2017	1,000,000	350,000	85,000	-
2018	(750,000)	-	-	-
2019	700,000	40,000	210,000	150,000
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2020 TAKEAWAYS

R&D Tax Credits

Permanent part of Tax Code

Activities-based credit - available to many industries

Can claim credit up to 3 prior years.

Process includes calculation and documentation

179D Tax Deductions

Architects, Engineers, & Contractors biggest beneficiary

Extended through 2020

Allocation Letters are critical path

CARES Act

NOL changes offer additional opportunities



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Q&A



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