SECTION 431

Minimum Funding

Multiemployer Plans

§431
MINIMUM FUNDING
MULTI-EMPLOYER DB PLANS

(a) Accumulated funding deficiency
(b) Funding standard account
(c) Additional rules
(d) Extension of amortization periods

MINIMUM FUNDING STANDARDS - WHY?

Internal Revenue Service has two concerns:

1. **Participant welfare in poorly funded plans**
2. **Excess deductions for well funded plans**

Minimum funding standard account (MFSA) is IRS definition of lowest allowable level of funding.

MFSA Credit balance is <u>cumulative</u> measure of plan's funding against lowest allowable.

RR 81-13
UNFUNDED ACCRUED LIABILITY

Individual Cost Method Definition:

UAL = Accrued Liability - Actuarial Asset Value

Aggregate Cost Method Definition:

$$UAL_1 = {}_{e}UAL_1$$
$$= (1+i)(NC_0+UAL_0) - (Contrib+i)$$

Actuarial Balance Equation:

UAL = O/S §431 bases - Credit Balance
- ARA + Debit Balance

ACCUM RECONCILIATION ACCOUNT (ARA)

After PPA 2006:

$ARA_{t+1} = ARA_t*(1+i)$

HISTORY

ARA was created by OBRA '87, due to different interest rate for waiver amortizations. This difference destroyed the actuarial balance equation:

Δ(ARA) = Waiver O/S bases at valuation interest rate less Waiver O/S bases at IRS penalty rate under §6621(b)

§1.412(c)(3)-1
REASONABLE FUNDING METHODS

Basic Funding Formula:

PVFB = PVNC + AAV + O/S §431 bases
- Credit balance - ARA + Debit balance

(<u>Should be</u> true for all actuarial cost methods)

Methods except THE Aggregate method:

PVFB = PVNC + AAV + UAL

This is true because

UAL = O/S §431 bases - Credit Balance
- ARA + Debit Balance

§1.412(c)(3)-1
REASONABLE FUNDING METHODS

For THE Aggregate method, use Basic Funding Formula to calculate PVNC

PVFB = PVNC + AAV + O/S bases - CB + DB

NOTE
No ARA here, since there is no UAL ➔
No actuarial balance equation either

Cost Methods which have UAL:
PVNC = PVFB - AAV - [O/S bases-CB-ARA+DB]

Cost Methods without UAL:
PVNC = PVFB - AAV - [O/S bases-CB+DB]

§431(b)
MFSA - AMORTIZATION PERIODS

	Number of Years
Initial Accrued Liability	15
Plan amendments	15
Actuarial assumption change	15
Experience Gain/Loss	15
Funding waivers	15
AMFSA switch back	5
OBRA Full Funding credit	20
Change in funding method	10 *

BASES ESTABLISHED BEFORE 2008 PLAN YEAR	
Initial Accrued Liability pre 1-2-74	40
Initial Accrued Liability post 1-1-74	30
Plan amendments	30
Actuarial assumption change	30

*Rules contained in Revenue Proc. 2000-40

§431(b)
INITIAL ACCRUED LIABILITY BASE

Depends on cost method, and whether plan grants past service credit prior to plan effective date

<u>INDIVIDUAL COST METHODS</u>

- **ILP always has IAL = 0**
- **EAN and PUC have non-zero IAL if plan grants past service credit**

<u>AGGREGATE COST METHODS</u>

- **AGG and Individual AGG bases always = 0**
- **FIL uses EAN results for IAL**
- **AAN uses PUC results for IAL**

§431(b)
PLAN CHANGE / ASSUMPTION CHG BASE

<u>INDIVIDUAL COST METHODS</u>

In general, base is equal to change in accrued liability

<u>AGGREGATE COST METHODS</u>

- **AGG and Indiv AGG - base always = 0**
- **FIL uses EAN results**
- **AAN uses PUC results**

§431(b)
GAIN / LOSS BASE

Definitions in Revenue Ruling 81-213 (page 19)

INDIVIDUAL COST METHODS

$G/L = {}_{e}UAL_1 - UAL_1$

AGGREGATE COST METHODS

$UAL_1 = {}_{e}UAL_1$ **by definition**

$G/L = \text{zero}$

§431(b)(7)(G)
SPECIAL AMORTIZATION RULE

Rule applies to plan amendments for these benefits:

- **Benefits are not paid as a life annuity**
- **Benefits are paid for less than 15 years**

Plan amendment base must be amortized over the period of years the benefits are payable

MFSA – TYPICAL SETUP

CHARGES		CREDITS	
Normal Cost	50,000	Credit balance	5,000
IAL amort	30,000	Gain amort	10,000
Loss amort	30,000	Assump amort	10,000
		12/31 Contribution	100,000
7% interest	7,700	7% interest	1,750
Total charges	117,700	Total credits	126,750

Based on exam condition 16, valuation date is first day of plan year

All MFSA items get interest to the end of the plan year

Next year's credit balance is excess of credits over charges = 9,050

§431(b)(5)
COMBINING / OFFSETTING AMORT BASES

Details from 12/82 proposed regulations:

1. **Group charge bases, calculate weighted average amortization period:**

$$\ddot{a}_{\overline{n}|\, i} = \frac{\phi \text{ Outstanding charge bases}}{\phi \text{ Amortization charges}}$$

2. **Group credit bases, calculate weighted average amortization period**
3. **You can round "n", but must produce highest minimum contribution**
4. **Offsetting of charges and credits is optional. If final net charge base, use previously calculated amortization period for the charge bases (and vice versa).**

ANCIENT HISTORY!
NEVER TESTED

§431(d)(1) MEPRA 2014

AMORTIZATION PERIODS – CHARGE BASES AUTOMATIC EXTENSION

Plan sponsor must submit application to Secretary of Treasury

- **Must include certification by actuary**
- **Secretary will extend amortization period for up to 5 additional years**
- **Can file for further amortization extension under 431(d)(2)**

§431(d)(1)(B)
ACTUARIAL CERTIFICATION - CONTENTS

1. Without extension, expect funding deficiency in current or next 9 plan years

2. Sponsor has adopted a plan to improve the plan's "funding status"

3. Plan will have sufficient assets to pay benefits plus expenditures over extension period

4. Sponsor has provided advance notice under 431(d)(3)

§431(d)(2)
AMORTIZATION PERIODS – CHARGE BASES ALTERNATIVE EXTENSION

Plan sponsor must submit application to Secretary of Treasury

- **Secretary will extend amortization period for up to 10 years less 431(d)(1) extension**
- **Secretary must act upon any extension under (d)(2) within 180 days of submission**

§431(d)(2)
AMORTIZATION PERIODS – CHARGE BASES ALTERNATIVE EXTENSION

Criteria to grant extension

1. Extension provides adequate funding for plan participants and beneficiaries, and

2. Failure to grant extension results in risk of plan termination, or reduction in benefit levels or employee compensation, and

3. Failure to grant extension is adverse to interests of plan participants

§431(d)(3)
ADVANCE NOTICE

When applying for extension, must provide evidence of prior notice to affected parties of extent of funding of guaranteed benefits and benefit liabilities

Affected parties:

- **(A) Participants in the plan,**
- **(B) Beneficiaries under the plan**
- **(C) Each employee organization representing participants in the plan**
- **(D) The PBGC**

DEMONSTRATION
ACTUARIAL EQUATION OF BALANCE

Write-down of expected unfunded actuarial liability:

(1)	01/01/17 UAL	96,000
(2)	Normal Cost	11,000
(3)	6% interest on (1)+(2)	6,420
(4)	12/31/17 contribution	25,000
(5)	12/31/17 UAL = (1)+(2)+(3)-(4)	88,420

DEMONSTRATION
ACTUARIAL EQUATION OF BALANCE

Write-down of MFSA amortization base

(1)	01/01/17 Amortization base	102,135
(2)	01/01/17 Amortization payment	7,184
(3)	6% interest on (1)-(2)	5,697
(4)	12/31/17 Amortization base = (1)-(2)+(3)	100,648

DEMONSTRATION
ACTUARIAL EQUATION OF BALANCE

Write-down of MFSA credits and charges

MFSA credits and credit balance are negative, and MFSA charges are positive

(1)	01/01/17 Credit balance	-6,135
(2)	01/01/17 Normal Cost	11,000
(3)	01/01/17 Amortization payment	7,184
(4)	6% interest on (1)+(2)+(3)	723
(5)	12/31/17 contribution	-25,000
(6)	12/31/17 Credit balance = (1)+(2)+(3)+(4)+(5)	-12,228

ACTUARIAL EQUATION OF BALANCE
UAL = O/S §431 BASES - CREDIT BAL - ARA

MFSA credits and credit balance are negative, and MFSA charges are positive

	(1) UAL	(2) O/S BASES	(3) CB	(4) ARA	Balance? (5) (2)+(3)-(4)-(1)
01/01/17 value	96,000	102,135	-6,135	-0-	-0-
Normal Cost	11,000			-0-	-0-
§431 Amort.	N/A			-0-	-0-
6% interest	6,420			-0-	-0-
12/31/17 Contrib.	-25,000			-0-	-0-
12/31/17 value	88,420			-0-	-0-

Complete the table to verify that the equation of balance is satisfied at 12/31/17.

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PRACTICE - ANNUITY DETERMINATION

O/S §431 Amortization Bases = 100,000
01/01 Amortization amount = 16,500

8% interest

$\ddot{a}_{\overline{n}|8\%} = 6.0606$

Determine the value of "n"

MFSA - CHANGE INTEREST RATE

01/01/2005 Effective date
01/01/2017 Valuation date

Old interest rate 8%, New interest rate 7%

IAL = 300,000 Change in UAL = 100,000

1. Recalculate IAL amortization at 7% over 18 years (30-12) for O/S bases

2. Set up new base 100,000, amortize over 15 years at 7%

3. O/S bases = (IAL)($\ddot{a}_{\overline{18}|8\%}$ / $\ddot{a}_{\overline{30}|8\%}$)

4. New amort = O/S bases divided by $\ddot{a}_{\overline{18}|7\%}$

INCORRECT to use (IAL)/ $\ddot{a}_{\overline{30}|7\%}$

REVENUE RULING 81-213

$G/L = {}_{e}UAL_1 - UAL_1$

Section 5 - UAL defined as excess, <u>if any</u>

$UAL_1 = AL_1 - AAV_1$, **but not less than zero**

Section 6 - Definition of expected UAL
NOTE: <u>this can be < zero</u>

${}_{e}UAL_1 = (1+i)*(NC_0+UAL_0) - (contrib+interest)$

REVENUE RULING 81-213

Section 8 - Handling of plan changes and assumption changes

1. Calculate gain/loss using prior year plan benefits, assumptions and cost method

2. Calculate impact of any changes in plan benefits, assumptions and cost method

3. No order specified for changes in item 2

REVENUE RULING 81-213

Section 7 - Special Gain/Loss calculation:

- **No other §431 amortization bases from LY (example: FFL applied in prior year)**
- **Individual cost methods only**

EXAMPLE:

01/01/2016	**UAL = O/S §431 bases - CB** **§431 FFL applies for 2016**
01/01/2017	**UAL <> zero bases - CB**

For Aggregate type methods, no G/L

➔ No easy way to restore balance equation

2017 GENERAL CONDITIONS – FUNDING MULTI-EMPLOYER PLANS

20. Cost method is reasonable

21. If plan benefit is based on pay, calculate normal cost as level % of pay - otherwise calculate normal cost as level $ per partic

23. Method change bases conform to RP 2000-40 and are amortized over 10 years

24. Unit Credit cost method matches definition in RP 2000-40

25. Ancillary benefits are not funded using one year term cost method

26. Under spread gain methods, PVE does NOT limit earnings under 401(a)(17)

27. AAV and MVA given are values prior to any adjustments (such as CB offset, or outstanding MFSA bases)

2017 GENERAL CONDITIONS – FUNDING MULTI-EMPLOYER PLANS

34. "Minimum Required Contribution" is smallest contribution that prevents a funding deficiency for the year. Determined ignoring these items:
    - credit balance
    - alternative minimum funding standard account
    - combining / offsetting amortizations

35. "Smallest amount that satisfies the Minimum Funding Standard" is smallest contribution that prevents a funding deficiency for the year. This is determined after reflecting the credit balance, and ignoring these items:
    - alternative minimum funding standard account
    - combining / offsetting amortizations

2017 GENERAL CONDITIONS – FUNDING MULTI-EMPLOYER PLANS

36. Can assume these items do not exist:
    - waivers of funding deficiencies
    - extensions of amortization periods

37. Interest rate for amortizing waivers and extensions of amortization periods is same as valuation interest rate

40. The full funding limitation has never applied

41. Expenses are paid directly by the employer, and do not affect funding of the plan

42. Assumed compensation increases

43. If not given enough data, ignore full funding limitations based on current liability

MINIMUM / MAXIMUM FUNDING PROBLEMS (for EA-2F) BY TYPE

Problem Type	2015 Exam	2014 Exam	2013 Exam	2012 Exam
SINGLE EMPLOYER – MAXIMUM				
Deductible limit / excise tax	08, 25, 36	30, 44	33, 43	46
SINGLE EMPLOYER – MINIMUM				
Smallest amount at 01/01			20	27, 29, 51
Smallest amount – other date			06	28
Minimum contribution at 01/01	46		13, 36, 55	01, 22, 52
Shortfall base / charge / amort at 01/01		26	46	
Carryover / prefunding balance – next yr	10, 30, 51, 56	02, 05, 11, 53	41	07
Calculate funding target, target NC	01, 11, 13	01, 08, 10, 13, 32, 35, 46, 54, 55	03, 04, 09, 11, 26, 28	13, 23, 37
AAV calculation	09, 16	16, 22	22	03, 33
Quarterly / liquidity contributions	02, 18, 24, 44, 53	21, 33, 41, 49	12, 27, 48, 49	16, 38
Waivers	17, 34, 49	31, 34	23, 37	04, 40
Cash balance plans	41, 55	17, 45	15, 18	14
401(a)(17) details	54			05
Miscellaneous definitions	19, 21, 23, 40, 42, 45, 57	09, 15, 19, 23, 24, 25, 36, 42	02, 05, 07, 08, 47, 53	10, 11, 15, 25
IRC 436		40	14, 32	02, 08, 17, 21, 36
At-Risk Funding target	31	18		
At-Risk definitions	32			43

Problem Type	2015 Exam	2014 Exam	2013 Exam	2012 Exam
MULTIEMPLOYER – MAXIMUM				
Deductible limit / excise tax			17	
MULTIEMPLOYER – MINIMUM				
AAV method / calculations	12, 48	29, 37	31, 39	
Assumption change – effect on minimum				
MFSA amortization payment	04, 27, 38, 47	47, 50, 52	24, 38, 42	47, 48
Actuarial balance equation	06, 14, 20, 35			12, 18, 26, 44
Plan change	05	04	44	
Full Funding Limitation	15			
Critical / endangered status	50	38	16, 21, 25, 35, 50	31, 49, 50
Miscellaneous definitions	43, 52	06, 07, 27	01	09

Problem Type	2015 Exam	2014 Exam	2013 Exam	2012 Exam
IRC 414				
IRC 415	33	51	40, 52	30
IRC 416				39
IRC 417(e)			10	42

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