7th Techtalk on Employee Benefits

Special Accounting for Employee Benefits

July 2023

Speakers:

Rajiv Sharma, Sr. Delivery Manager (Director), Mercer India

Shailesh Gupta, Sr. Consultant - Mercer India

Nikant Aggarwal, Delivery Manager (Associate Director) – Mercer India



Housekeeping Points





Mute



Q&A





Recording





Speakers and Facilitators





Rajiv Sharma



Shailesh Gupta



Nikant Aggarwal



Hemanshu Jain (Facilitator)

Speaker Introductions





Rajiv Sharma

Rajiv is Sr. Delivery Manager (Director) at Mercer Consulting India Pvt. Ltd. and currently, leading a diverse group of 100+ actuarial professionals delivering actuarial services in employee benefits (DB schemes) and US healthcare domains.

He has about 15 years of experience with Mercer in both technical and leadership roles with extensive work experience of actuarial valuations of defined benefit schemes, accounting under US GAAP, IFRS, special accounting, actuarial analytics and financial reporting. Have expertise in offshore-onshore business model, developing center of excellence, offshore transitions, change management, capability enhancement and business / process transformation to deliver competitive and value-added services.

Before joining Mercer, Rajiv worked in a Public Sector Life Insurance company for 7 years in their Actuarial & Underwriting dept.

Speaker Introductions





Shailesh Gupta

Shailesh has more than 15 years of experience in the US pension domain. He is working as a senior consultant at Mercer (India) & responsible for the US client consulting on the pension plan valuations, plan designs, experience studies, costing projections. He consults with a variety of clients including private sector and not-for-profit organizations, ranging in size from less than 100 to over 10,000 employees. He advises clients across a broad range of retirement issues including funding, accounting, and pension risk transfers.

Before stepping into consulting role, he played diversified role on technical & people management front. It includes technical lead, training, business transitions, managing workflow of actuarial valuation work from Mercer Global services office based in India. He is also a subject matter expert for PPA regulation [Pension Protection Act] and develop resources/materials to further equip retirement consultants to build deeper relationships with clients and prospects.

Speaker Introductions





Nikant Aggarwal

Nikant is working as a Delivery Manager at Mercer Consulting India Pvt. Ltd. and responsible for leading, managing workflow and delivering actuarial valuation work to Mercer US consulting offices from Mercer Global services office based in India.

Overall, he has 14+ years' experience in the pension industry. He has experience in the areas of actuarial valuations of defined benefit schemes, accounting under US GAAP/IFRS, experience studies, projections, multi-national clients' accounting coordination. During his career, he got an opportunity to work for other geographies like Thailand, UAE & Japan valuations.

He is also training and SME lead, whereby his role is to understand the training requirements and manage the technical trainings at Mercer (India).

Presentation Disclaimer



This presentation has been prepared for educational purposes only. Some of the methodologies we share here are based on our understanding of relevant accounting standard guidance for the topic and practices followed by actuaries globally. There could be multiple different scenarios that are possible in reality and this presentation do not cover all. Our intent is to introduce you to principles and recommend you to apply your independent professional judgement.

Agenda



- Introduction to Special Accounting
- Understanding of following special accounting events with examples:
 - > Settlement
 - Prior/Past service cost
 - Curtailment
- Q&A





"Special Events" need "Special Accounting"!!

What are the "Special Events" related to an occupational DB schemes?

- Events which are <u>non-routine</u> events of an ongoing DB plan such as large terminations (involuntary), selling liabilities to an insurance company etc.
- Generally, do not happen every year in the life of a scheme.
- Also commonly known as "Significant Events" as these events significantly impact the plan's liabilities, assets (if funded), gains/losses etc. and therefore accounting statements.
- Require special calculations to determine the effect in the income statement for the accounting period typically in which event happened.
- Lead to "accelerated" recognitions of unrecognized amounts such as gains/losses, prior service cost.



The special calculations are typically done in four steps:

- 1. Updated valuation results (re-measurement) as of the date of the event, as if the event had not taken place.
 - using current data and assumptions (in particular, discount rate)
 - re-measured results will be used to determine the balance sheet position **before** the event
- 2. Determination of costs or credits associated with the event.
 - > change in assets (if funded) and plan's liabilities at the date of event
- 3. Revised valuation results as of the "date of the event", now fully reflecting the changes resulting from the event.
- 4. Update accounting disclosure & expense reflecting special event impacts.
 - reflect impact of the event and accelerated recognition of unrecognized amounts

Common significant events:

- > Settlements
- Prior/Past Service Cost
- Curtailments
- > Business combinations & divestures / M&A / Transfers
- > Special termination benefits



Special Accounting Event Settlement

Introduction:





A settlement event occurs when an enterprise / plan sponsor:

decides to make a **permanent reduction** in plan obligations resulting from a transfer of risk to an entity outside the control of plan sponsor.

- > An irrevocable action
- > Relieves employer/sponsor of primary responsibility of settled benefit obligation
- > Eliminates significant risks related to obligations and assets used to effect the settlement

Examples:

- ✓ Lump sum payments in total above certain thresholds *typical threshold is the sum of the service cost plus interest cost for the year*
- ✓ Annuity buy-outs: Purchasing nonparticipating annuities from an insurance company

Definitions under US GAAP and IFRS:



US GAAP

- > Should meet following **three** requirements:
 - a) It is irrevocable
 - b) It **relives** the employer (or plan) of primary responsibility for a pension benefit obligation, and
 - c) It eliminates **significant** risks related to the obligation and the assets used to effect the settlement

General Threshold: Lump sum paid in a year / Cost of annuity purchase ≥ Service Cost + Interest Cost, lower threshold optional

IFRS

- Must eliminate all legal or constructive obligation for all or part of a benefit -Significant settlement.
- ➤ Lump sums paid according to regular plan provisions are not settlements.
- ➤ However, lump sums paid as part of a window are settlement.

No recommended threshold limit





How to measure in IFRS:

- > Re-measure the liability ignoring the settlement event but using latest assumptions as of the measurement date.
- > Segregate the re-measured PBO of settled participants of the plan to arrive at PBO after settlement. Settled records are those who are going out of the plan in lieu of lump sum or annuity purchase.
- > Settlement **gain or loss** is generally measured as the **difference** between the PBO being settled and the actual settlement amount (*LS amount or cost of annuity purchase*).
- ➤ **Immediate recognition** of this entire gain/loss in pension expense (P&L) as "Settlement Gain/Loss" component of service cost.

How to measure in US GAAP:



- 1. Estimate the unrecognized amounts (e.g. gain/loss) using re-measured PBO and latest assets just **before the settlement**.
- 2. Segregate the PBO of settled participants of the plan to arrive at **PBO after settlement**. Settled records are those who are going **out of the plan permanently** in lieu of lump sum or annuity purchase.
- 3. The **difference** (if any) between **PBO settled** and **Assets used** to settle the PBO becomes the **gain/loss** due to the event and **added** to both unrecognized gain/loss and re-measured PBO before settlement from step 1.
- 4. Settlement gain or loss is equal to-Unrecognized Gain/loss (Step 3) * Settlement Ratio where Settlement Ratio = Settlement Cost i.e. LS Paid / Annuity purchase cost divided by re-measured PBO before settlement (Step 3)
- 5. Settlement gain/loss is shown in P&L (NPBC) as an expense.

Accounting for settlement – example 1

Annuity purchase of \$3,000,000

Decrease in PBO due to settlement: \$3,000,000

Cost of annuity purchase: \$3,000,000

Unrecognized PSC: \$500,000

Unrecognized (gain)/loss: \$7,000,000

Balance Sheet	Before Settlement	Effect of Settlement	After Settlement
	[Re-measured]		
РВО	(50,000,000)	3,000,000	(47,000,000)
MVA	45,000,000	(3,000,000)	42,000,000
Funded Status	(5,000,000)	-	(5,000,000)
Unrecognized PSC	500,000	-	500,000
Unrecognized (gain)/loss	7,000,000	(420,000)	6,580,000
Accumulated contribution in excess of net periodic benefit cost	2,500,000	(420,000)	2,080,000

Settlement ratio	6%	= 3,000,000 / 50,000,000
Settlement expense	420,000	= 6% * 7,000,000

The settlement ratio equals the total settled amount of 3,000,000 divided by the total settlement adjusted PBO of 50,000,000, which equals 6.0%.



Accounting for settlement – example 2

Annuity purchase of \$3,000,000, but PBO for group settled was \$2,500,000 before annuity purchase

		, ,			
Balance Sheet	Before Settlement [Re-measured]	Adjustment due to cost of Settlement	After adjustment	Effect of Settlement	After Settlement
РВО	(50,000,000)	(500,000)	(50,500,000)	3,000,000	(47,500,000)
MVA	45,000,000	-	45,000,000	(3,000,000)	42,000,000
Funded Status	(5,000,000)	(500,000)	(5,500,000)		(5,500,000)
Unrecognized PSC	500,000	-	500,000		500,000
Unrecognized (gain)/loss	7,000,000	500,000	7,500,000	(445,545)	7,054,455
Accumulated contribution in excess of net periodic benefit cost	2,500,000		2,500,000	(445,545)	2,054,455

Settlement ratio	5.9%	= 3,000,000 / 50,500,000
Settlement expense	445,545	= 5.9% / 7,500,000

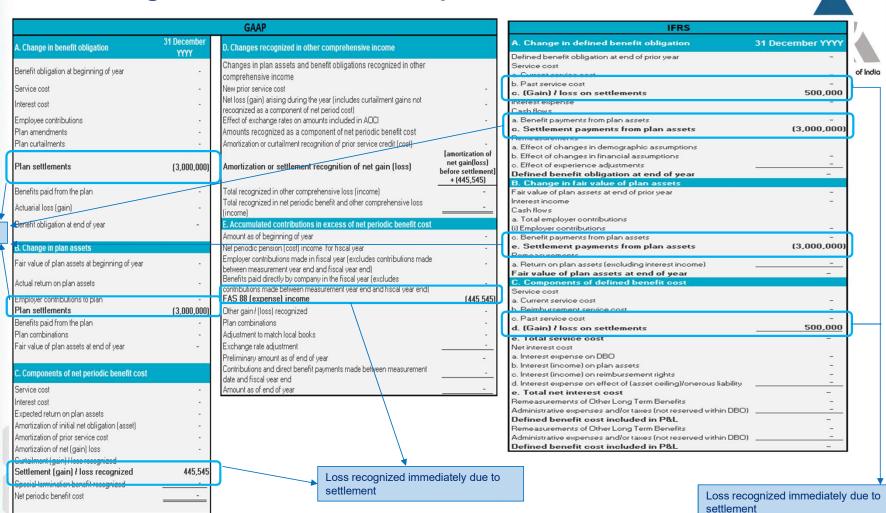
Settlement loss of \$0.5M added to unrecognized loss



US GAAP

Accounting for settlement – example 2

Annuity purchase amount





Special Accounting Event Prior/Past Service Cost (PSC)

Plan amendment Introduction:





Plan Amendments refer to any change of plan terms or arrangements that causes an increase or decrease in PBO/DBO.

Example:

- ✓ Change in benefit definition / formula,
- ✓ Change in retirement eligibility etc.
- ➤ Past Service Cost (called *prior service cost* under US GAAP) is triggered by a <u>change in the</u> <u>liabilities (PBO/DBO)</u> as a result of a plan amendment.
- ➤ Past Service Cost may be either **positive** (when benefits are introduced or improved) or negative (when existing benefits are reduced).
- Any plan amendment which reduces significantly benefits for future (and past) service should be accounted for as a Curtailment and not as Prior Service Cost.

Prior/Past service cost (PSC)

Recognition of Prior/Past Service Cost:



US GAAP

- Requires to be initially recognized in OCI and then amortize through P&L i.e. net periodic benefit cost.
- Amortized over the average future service without reflecting interest payments [straight line basis] in general.
- In cases where the population is mostly or all inactives, it is amortized over the average remaining lifetime.
- ➤ Generally, any new negative prior service cost is first used to offset an existing positive one.

IFRS

- Requires **immediate** recognition in P&L for the effects of plan amendments that create an increase (or decrease) to the benefit obligation (i.e. past service cost).
- ➤ Thus, full Past Service Cost is immediately recognized as component of NPPC (included in Service Cost)



Prior/Past service cost – example 1

As of valuation date Jan 01, 2021, Company XYZ modified pension benefit formula for active employees, resultant an increase in PBO by 750,000 due to this plan amendment.



US GAAP

The average remaining service period was 10.5 years as of Jan 01, 2021.

This one time loss should be amortized through pension expense (NPBC) based on straight line over the average remaining service period of employees.

A	Amortization of unrecogniz	ed prior service cos	t
Financial Year	Beginning of year Balance	Amortization	End of year Balance
2021	750,000	71,429	678,571
2022	678,571	71,429	607,142
2023	607,142	71,429	535,713
2024	535,713	71,429	464,284
2025	464,284	71,429	392,855
2026	392,855	71,429	321,426
2027	321,426	71,429	249,997
2028	249,997	71,429	178,568
2029	178,568	71,429	107,139
2030	107,139	71,429	35,710
2031	35,710	35,710	0

Prior/Past service cost – example 1 **GAAP IFRS** A. Change in benefit obligation **FYE 2021** A. Change in defined benefit obligation **FYE 2021** Defined benefit obligation at end of prior year Benefit obligation at beginning of year Service cost a. Current service cost b. Past service cost 750,000 c. (Gain) / loss on settlements Plan amendments 750,000 Interest expense Plan curtailments Cash flows Plan settlements a. Benefit payments from plan assets Increase in liability due Special termination benefits b. Benefit payments from employer Benefits paid from the plan to plan amendment c. Settlement payments from plan assets Actuarial loss (gain) Exchange rate changes d. Settlement payments from employer Benefit obligation at end of year Remeasurements a. Effect of changes in demographic assumptions b. Effect of changes in financial assumptions B. Components of net periodic benefit cost FY 2021 Service cost c. Effect of experience adjustments Defined benefit obligation at end of year Interest cost Expected return on plan assets B. Components of defined benefit cost **FYE 2021** Amortization of prior service cost 71,429 Amortization of net (gain) loss Amortization of PSC: Current service cost Curtailment (gain) I loss recognized 71,429 = 750,000 / 10.5Past service cost 750,000 Settlement (gain) Hoss recognized Special termination benefit recognized (Gain) / loss on settlements Net periodic benefit cost Total service cost Net interest cost C. Changes recognized in other comprehensive income **FYE 2021** Interest expense on DBO Changes in plan assets and benefit obligations recognized in other Interest (income) on plan assets Fully recognized in P&L New prior service cost Total net interest cost 750,000 Net loss (gain) arising during the year (includes curtailment gains not Administrative expenses and/or taxes (not reserved within recognized as a component of net period cost) Defined benefit cost included in P&L Amounts recognized as a component of net periodic benefit cost

Amortization or curtailment recognition of prior service

Total recognized in net periodic benefit and other comprehensive loss

Amortization or settlement recognition of net gain (loss)

Total recognized in other comprehensive loss (income)

(71,429)

credit (cost)

Initially recognized in

OCI with subsequent

charging to the P&L

Prior/Past service cost – example 2 [Multiple plan amendments]

The plan sponsor come up with one more amendment effective Jan 01, 2022 and PBO is increased by 400,000. The average remaining service period was 10.1 years as of Jan 01, 2022.

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					US GA	AP					
Base 1			Base 2			Base 1 + Base 2					
Amortization of unrecognized prior service cost			Amortization of unrecognized prior service cost			Amortization of unrecognized prior service cost					
Financial Year	Beginning of year Balance	Amortization	End of year Balance	Financial Year	Beginning of year Balance	Amortization	End of year Balance	Financial Year	Beginning of year Balance	Amortization	End of year Balance
2021	750,000	71,429	678,571	2021				2021	750,000	71,429	678,571
2022	678,571	71,429	607,142	2022	400,000	39,604	360,396	2022	1,078,571	111,033	967,538
2023	607,142	71,429	535,713	2023	360,396	39,604	320,792	2023	967,538	111,033	856,505
2024	535,713	71,429	464,284	2024	320,792	39,604	281,188	2024	856,505	111,033	745,472
2025	464,284	71,429	392,855	2025	281,188	39,604	241,584	2025	745,472	111,033	634,439
2026	392,855	71,429	321,426	2026	241,584	39,604	201,980	2026	634,439	111,033	523,406
2027	321,426	71,429	249,997	2027	201,980	39,604	162,376	2027	523,406	111,033	412,373
2028	249,997	71,429	178,568	2028	162,376	39,604	122,772	2028	412,373	111,033	301,340
2029	178,568	71,429	107,139	2029	122,772	39,604	83,168	2029	301,340	111,033	190,307
2030	107,139	71,429	35,710	2030	83,168	39,604	43,564	2030	190,307	111,033	79,274
2031	35,710	35,710	0	2031	43,564	39,604	3,960	2031	79,274	75,314	3,960
				2032	3,960	3,960	0	2032	3,960	3,960	0

39,604 = 400,000 / 10.1

Special attention is required in the year 2031 as base 1 is fully amortized



Special Accounting Event Curtailment

Introduction:





A curtailment occurs when an enterprise / plan sponsor either:

- > intends to make a **material** reduction in the number of employees covered by a plan, or
- > plans to amend the terms of a defined benefit plan such that the accrual of defined benefits for some or all future service is **eliminated** for a **significant** number of present employees.
- Curtailment is measured as <u>difference of PBO</u> "before" and "after" the event.
- Generally, gain on curtailment due to significant reduction of benefits rights.

Examples:

- ✓ Termination of employees earlier than expected
 - The closure of a business
 - Discontinuing a business segments
 - Reduction in force
- ✓ Freezing of a plan

Definitions under US GAAP and IFRS:



US GAAP

- A curtailment is defined as an event that <u>significantly reduces</u> the expected years of future services, or
- The **elimination**, for a **significant** number of active employees, of the right to earn benefits for some or all of their future service
- Any other event such as reduction in the level of benefit is <u>not</u> a curtailment. That would come as negative Prior Service Cost (prior service credit);

<u>IFRS</u>

- The definition of a curtailment is limited to <u>significant reduction</u> in number of employees covered by plan;
- Any other event such as reduction in the level of benefit is <u>not</u> a curtailment. That would come as negative Past Service Cost (past service credit);
- ➤ Under IAS19(R), both Curtailments and Past Service Costs are accounted for together under Service Cost.



How to measure in IFRS:

- ➤ The difference in PBO (*re-measured using latest assumptions*) before and after the event becomes the **curtailment gain/loss**.
- ➤ Immediate recognition of this entire gain/loss in pension expense (P&L) as "Past Service Cost" component of service cost.
- Note that in IFRS, there is no separate line to show "curtailment" gain/loss but it is recognized as past service cost.

How to measure in US GAAP:



The curtailment gain/loss to be recognized in pension expense (NPBC) is calculated as a <u>sum</u> of two components:

- Additional recognition of any unrecognized Prior Service Cost (PSC)
- Gain/Loss due to change in liability as a result of the event

Component 1) - Prior Service Cost component (PSC)

- Any unrecognized PSC (*re-measured*) just before the curtailment event to be recognized as below:

Unrecog. PSC * Curtailment Ratio

Curtailment Ratio =

total reduction in exp. remaining future years of service total number of exp. years of future service before curtailment

How to measure in US GAAP:



Component 2) - Gain/Loss

Two scenarios are possible as per the change in liability due to event

Decrease in liability due to curtailment

Scenario 1

Scenario 2

Increase in liability due to curtailment

Net unrecognized loss* [pre-curtailment]

- PBO gain is first applied to reduce any existing unrecognized loss, then any excess is recognized as a curtailment gain in NPBC
- If PBO gain < existing unrecognized loss, then there is no P&L(NPBC) impact

Net unrecognized gain* [pre-curtailment]

 If there is an existing unrecognized gain, then entire PBO gain flows into P&L (NPBC)

Net unrecognized gain* [pre-curtailment]

- PBO loss is first applied to reduce any existing unrecognized gain, then any excess is recognized as a curtailment loss in NPBC
- If PBO loss < existing unrecognized gain, then there is no P&L(NPBC) impact

Net unrecognized loss* [pre-curtailment]

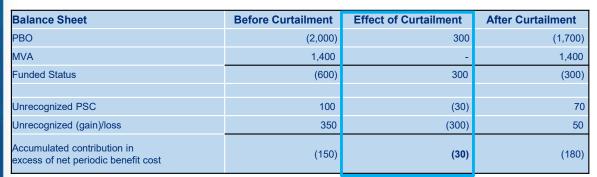
 If there is an existing unrecognized loss, then entire PBO loss flows into P&L (NPBC)

*Re-measured unrecognized gain/loss position just before curtailment event

(PBO reduction does not exceed offsetting unrecognized amounts)

Decrease in PBO due to curtailment: \$300

Unrecognized PSC: \$100 Unrecognized (gain)/loss: \$350



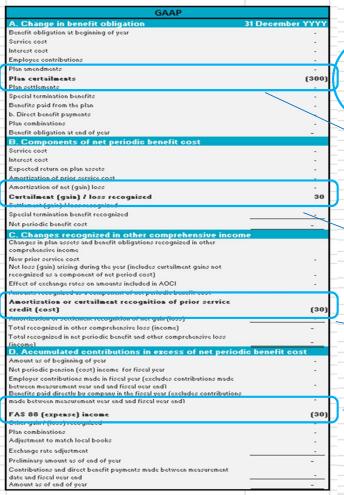
Decrease in PBO due to curtailment	300
Expected total future years of service before curtailment	500
Reduction in expected total future years of service due to curtailment	150
Curtailment Ratio	30% = 150 / 500
Unrecognized prior service impact	30 = 30% * 100
Unrecognized (gain)/loss impact - PBO reduction of 300 is < 350	300
so full amount of 300 is applied to unrecognized loss	

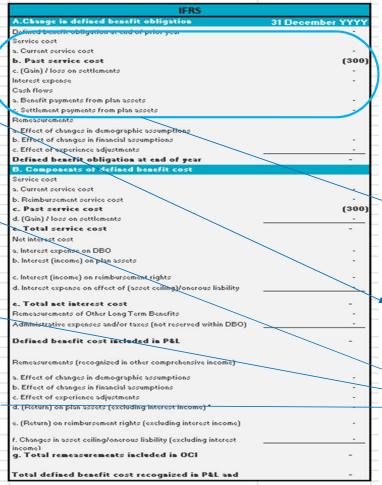
The curtailment expense in this example is \$30



US GAAP

(PBO reduction does not exceed offsetting unrecognized







No separate sub-section for curtailment, it is shown under "Past service cost" (similar to PSC)

Decrease in PBO due to curtailment, the same will be offset the loss in gain/loss reconciliation

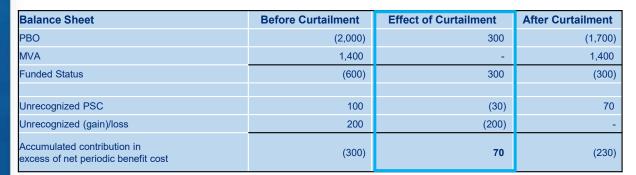
Additional amortization of PSC shown under curtailment in NPBC Same amount flows under FAS 88 head under accumulation contribution in excess of NPBC reconciliation

(PBO reduction does exceed offsetting unrecognized amounts)

Decrease in PBO due to curtailment: \$300

Unrecognized PSC: \$100

Unrecognized (gain)/loss: \$200



Decrease in PBO due to curtailment	300
Expected future years of service before curtailment	500
Reduction in expected future years of service due to curtailment	150
Curtailment Ratio	30% = 150 / 500
Unrecognized prior service impact	30 = 30% * 100
Unrecognized (gain)/loss impact - PBO reduction of 300 is > 200	200
so 200 is applied to unrecognized loss and remaining 100 is recognized in P&L	

The curtailment expense in this example is an *income* item of \$70 (\$100 income offset by \$30 additional recognition of PSC)





(Plan has unrecognized gain before curtailment)

Decrease in PBO due to curtailment: \$300

Unrecognized PSC: \$100

Unrecognized (gain)/loss: (\$250)

Balance Sheet	Before Curtailment	Effect of Curtailment	After Curtailment
PBO	(2,000)	300	(1,700)
MVA	1,400	-	1,400
Funded Status	(600)	300	(300)
Unrecognized PSC	100	(30)	70
Unrecognized (gain)/loss	(250)	-	(250)
Accumulated contribution in excess of net periodic benefit cost	(750)	270	(480)

Decrease in PBO due to curtailment	300
Expected future years of service before curtailment	500
Reduction in expected future years of service due to curtailment	150
Curtailment Ratio	30% = 150 / 500
Unrecognized prior service impact	30 = 30% * 100
Unrecognized (gain)/loss impact - because the plan has an unrecognized	0
gain, so the rule state that there is no adjustment to the (gain)/loss line	

The curtailment expense in this example is an *income* item of \$270



US GAAP

Appendix - Re-measurement of pension expense when measurement date is <u>not</u> FYE

On May 01, 2023, the company closed a major plant and terminated the employees. The plant closing is considered a significant event and would require re-measurement of the plan assets and obligation as of May 01

A. Net Periodic Benefit Cost	No Special Accounting	Sp	ecial Accounting		
	Annual 2023 Expense	Jan 01 - April 30, 2023 - Prior to Re-measurement	May 01- Dec 31, 2023 After Re-measurement	Total	
Service Cost	65,000,000	21,666,667	7,000,000	28,666,667	
nterest Cost	30,000,000	10,000,000	18,000,000	28,000,000	All the
Expected Return on Plan Assets	(53,000,000)	(17,666,667)	(35,000,000)	52,666,667)	numbers a simply prorated a
Amortization of Prior Service Cost (Credit)	(2,000,000)	(666,667)	(833,333)	(1,500,000)	per no. of months
Amortization of Net (Gain)/Loss	35,000,000	11,666,667	2,000,000	13,666,667	
Settlement Charge (Credit)	-	-	-	-	
Curtailment Charge (Credit)	-	-	(4,000,000)	(4,000,000)	
Net Periodic Benefit Cost (including Settlement & Curtailment)	75,000,000	25,000,000	(12,833,333)	12,166,667	
3. Reconciliation of Funded Status as of Beginning of Period:					
Projected Benefit Obligation	1,000,000,000	1,000,000,000	900,000,000		
/larket Value of Assets	900,000,000	900,000,000	850,000,000		
Funded Status	(100,000,000)	(100,000,000)	(50,000,000)		
Net (Gain)/Loss	342,000,000	342,000,000	200,000,000	Discount rat	e is
Prior Service Cost/(Credit)	(6,000,000)	(6,000,000)	(5,333,333)	re-determine	ed as of May
C. Actuarial Assumptions				aas 15 . 6 m	
Discount Rate	4.00%	4.00%			
Expected Return on Plan Assets Rate of Compensation Increases	6.25% 4.00%	6.25% 4.00%			

Q&A







