Issues for Standing Committee Consideration

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Treatment of Seasonal Resources

Definition of Seasonality (section IV.A)

The Protocol (section IV.A) defines "Seasonal Resource" as:

- (a) a simple-cycle combustion turbine (SCCT) owned or leased by the Company,
- (b) any Seasonal Contract, which is further defined as a Wholesale Contract pursuant to which the Company acquires power for five or less months during more than one year, and

c) Cholla Unit 4.

These are clearly ad hoc, interim definitions, with little underlying rationale. The definitions do not adequately address the seasonality of existing resources, let alone the range of potential new resources. Development of comprehensive, consistent criteria for seasonality of resources will reduce the risk of timeconsuming arguments about the allocation of resources as they come on line, and reduce the incentives for PacifiCorp and the various states to prefer specific resources based on the inconsistencies in the definitions of Seasonal Resources.

The designation of resources as Seasonal Resources, if it is necessary for an equitable, cost-based allocation of PacifiCorp's costs, must be complete and symmetrical, to avoid undesirable effects on the regulatory and planning processes. The Protocol charges the MSP Standing Committee with developing comprehensive criteria for identifying Seasonal Resources, which can be based exclusively on the seasonal pattern of their operation, without regard for technology, ownership, or contractual arrangement.

Inconsistencies in the Protocol's Three Categories of Seasonal Resources

Part (a) of the definition designates a particular technology (SCCTs) under two ownership structures (PacifiCorp ownership and lease) as Seasonal Resources, regardless of how they actually operate. Another technology that operated with the same seasonal pattern as PacifiCorp's SCCTs, or even operated in fewer months, would not be designated as seasonal. A unit-contingent contract to purchase power from an SCCT at cost, even though the pricing would be very similar to a lease, would not be considered a Seasonal Resource.

Part (b) arbitrarily leaves out clearly seasonal contracts that provide power for an entire six-month season (e.g., May–October, November–April), or for all but the core of one season (e.g., September–May, March–November). It also excludes all contracts that have a seasonal pattern of use if they provide some energy, even a nominal amount, in more than five months.

Part (c) is inherently counter-intuitive, since Cholla is a baseload coal plant, not a seasonal resource. PacifiCorp has bundled together Cholla and the APS exchange to avoid the problem of pricing seasonal exchanges. As described below, the MSP Standing Committee must address that broader issue for other exchanges, and in the process can fix the misclassification of Cholla.

a) SCCTs as Seasonal Resources

There are two problems that need to be corrected in part (a) of the definition. First, the Protocol language identifies a particular technology (SCCT) as inherently seasonal, whether it operates that way or not, and excludes other technologies. Second, the Protocol describes seasonal resources in terms of ownership or contractual relationship, rather than operation.

It is inappropriate to single out SCCTs as Seasonal Resources. Depending on load shapes, market conditions, fuel costs, and other factors, SCCTs may operate seasonally or annually. Resources other than SCCTs can operate as seasonally as SCCTs do, or more so. The Protocol would treat an SCCT as seasonal and another PacifiCorp-owned or leased resource as non-seasonal, even if they operate on the same annual schedule.

On the PacifiCorp system, SCCTs have been operating throughout the year, with the Gadsby and West Valley plants having their maximum generation in April and October.

	Gadsby SCCTs	West Valley	Little Mountain
July-02	start-up	35%	13%
August-02	36%	44%	7%
September-02	24%	47%	51%
October-02	47%	54%	85%
November-02	21%	25%	92%
December-02	28%	37%	90%
January-03		#N/A	101%
February-03		#N/A	102%
March-03		33%	98%
April-03		54%	96%
May-03		26%	0%
June-03		33%	-1%
July-03		44%	15%
August-03		46%	34%
September-03		34%	96%
October-03		30%	99%
November-03		1%	107%
December-03		3%	101%

Monthly capacity factors for SCCTs¹

In addition, SCCTs can be connected to heat recovery for cogeneration operations. Consolidated Edison is currently completing just such an SCCT cogeneration facility to serve its electric and steam customers, and similar configurations are not uncommon in industrial and QF applications. The Protocol would appear to classify even a baseload SCCT as a Seasonal Resource.

Among owned resources, wind plants on the PacifiCorp system have operated seasonally, and PacifiCorp expects future wind plants to operate seasonally. The Medicine Bow wind site produced four times as much energy in January 2003 as in June, July or August. PacifiCorp expects that future wind resources will have a strongly seasonal operating pattern. PacifiCorp projects that the IRP wind purchases will deliver four times as much energy and capacity in January as in August. Since the wind will blow at the same time regardless of whether

¹ From CCS 2.13.3 for 2002 and EIA-906 data for 2003. The Gadsby generation is not differentiated from the steam units in the EIA-906 report.

PacifiCorp owns, leases, or purchases from the wind farm, the same seasonal pattern should apply to all wind resources at similar sites.²

Likewise, it is inappropriate for the Protocol to identify resources owned or leased by PacifiCorp as Seasonal Resources, but not purchases from similar resources operating in similar patterns. The interim Protocol language treats an SCCT as a Seasonal Resource if PacifiCorp owns or leases it, but not if PacifiCorp purchases all of the unit's output at cost, even though that contractual arrangement would be very similar to the lease arrangement. This distinction makes no sense; furthermore, it introduces perverse incentives for the various states to prefer different contractual relationships, potentially including relationships that do not minimize cost or risk.

PacifiCorp's resource decisions should be based on the costs and risks of alternative resources. The states should be indifferent between ownership and contractual structures, other than their effects on costs and risks of a resource. The initial Protocol language does not leave states indifferent; if PacifiCorp is considering adding an SCCT that will operate as a summer peaker, the winterpeaking states would prefer that PacifiCorp own or lease the plant (making it a Seasonal Resource, allocated to the summer), while the summer-peaking states would prefer that PacifiCorp issue an RFP to purchase the output of the plant (making it a System Resource).

b) Seasonal Contracts

The MSP Standing Committee needs to address the incomplete and inadequate criteria set forth by part (b) of the definition of Seasonal Resources. Part (b) would allow purchases to be highly seasonal, without meeting the initial Protocol definition of Seasonal Resources. The following examples of possible future contracts represent purchases that would strongly favor the winter without triggering the Protocol definition of Seasonal Resources. Each of these might represent a prudent and cost-effective resource decision.

² Some wind sites will have seasonal and diurnal generation different from those assumed in the IRP.

- PacifiCorp could purchase power for the summer in five-month contracts (which would be allocated on summer load), and for the winter in sevenmonth contracts (which would be allocated on annual load). The purchases might be from the same or different suppliers.³
- A contract could provide 100,000 MWh in each of December, January, and February, and 100 MWh in November, March and April.
- PacifiCorp could sign a year-round contract that provides 20,000 MWh each month, at up to 200 MW per hour, with the deliveries in the winter being in high-load hours and the deliveries in the summer being in low-load hours.
- A contract could provide power to PacifiCorp for six months, or even ten months, including the winter by excluding the summer and most importantly the peak months of July and August.

In each of these four examples, the resources that preferentially serve winter loads would probably encourage PacifiCorp to acquire more summer-only resources, since year-round resources would tend to produce excess supply in the winter.⁴ The Protocol might well identify the summer resources as Seasonal Resources and allocate them on summer loads, even though they are simply filling in the supply gap left by winter-peaking resources that the Protocol treats as System Resources.

A few current and proposed PacifiCorp purchases have characteristics similar to these hypotheticals.

- The BPA South Idaho Exchange provides net energy to PacifiCorp yearround, but energy deliveries in October–February average about four times those in April–August. (CCS 2.4.3)
- The Foote Creek contracts are exchanges in which PacifiCorp provides various shaping and delivery benefits to utilities with entitlements in the Foote Creek wind plants. Due to the seasonal operation of those plants, the

³ PacifiCorp treats its year-round sale to PSCo as two separate seasonal transactions.

⁴ These examples could also be reversed, with the summer benefiting disproportionately from resources paid for by the entire system.

contracts provide PacifiCorp with substantially more energy and capacity in the winter than in the summer. For example, FC I PPW/BPA and FC III PSCo/PSCo together provide about 31 MW in November–January, and just 18 MW in August. (CCS 2.4.4)

• PacifiCorp projects that the IRP wind purchases will deliver roughly four times as much power on the winter peak as on the August peak. For example, PacifiCorp expects the wind contracts to provide 398 MW on the January peak in FY 2009, and only 104 MW on the August peak. None of these wind purchases would be considered Seasonal Resources by the Protocol, even though PacifiCorp would need about 300 MW of summer seasonal resources simply to have the same capacity at summer peak as at winter peak.

In addition, the Protocol fails to adequately assess the contribution of individual power purchases to PacifiCorp's monthly resource mix. Both for identifying Seasonal Resources and for allocating their costs across months, the Protocol measures the monthly benefit by energy delivered in the month. This approach inappropriately assigns as much value to deliveries of energy in low-load hours as to deliveries in high-load hours. Moreover, the capacity benefit of a contract can also have value in addition to the energy benefits.

The MSP Standing Committee can easily correct problems in the identification of seasonal resources with any of a number of consistent definitions, such as:

A seasonal resource is one that provides more than **twice** the net **capacity** over a period of **four** contiguous months than in another period of the same number of contiguous months.

Each of the bolded terms could be replaced with other measures. "Capacity" could be replaced with "energy delivery in high-load hours," "four months" could be as few as three or as many as six, and "twice" could be 150% or some other ratio. The MSP Standing Committee might want to use multiple tests, such as allowing either energy or capacity to determine seasonality, or define some composite measures. Rather than using any period of contiguous months, the MSP Standing Committee might want to limit the review of seasonality to particular predefined season, such as a summer period from June to August and a winter period from December to February.

The MSP Standing Committee will probably want to review the range of existing, former, and proposed PacifiCorp contracts, as well as potential future contracts, to determine which criteria best describe Seasonal Resources. The MSP Standing Committee will also probably want to avoid flagging as Seasonal Resources those resources for which a seasonal allocation would not be meaningfully different from an annual allocation.

c) Cholla

Despite lacking any characteristics of a "Seasonal Resource" in any normal sense of the term, PacifiCorp's share of Cholla is inappropriately defined thus in the interim Protocol. Cholla is a baseload unit, producing essentially the same amount of energy every month. This counter-intuitive designation arose from the history of the MSP and the need for a quick solution to get the Protocol in place.

In the course of the MSP, PacifiCorp developed an allocation proposal (the Hybrid approach) that would have assigned resources to PacifiCorp's Eastern and Western control areas based on their location. The eastern states pointed out that the original Hybrid proposal would have assigned to the East the APS Exchange, which increased summer load and provided winter resources, neither of which was particularly desirable for the summer-peaking East. Clearly, PacifiCorp entered into the APS Exchange to provide winter power for the winter-peaking western part of the system.

PacifiCorp agreed to modify the Hybrid to assign the APS Exchange to the East, and proposed to assign Cholla to the East as well. That assignment would both reduce the incremental complexity of reassigning the APS Exchange and moderate the revenue-requirements effect of the APS Exchange on the western states.

As PacifiCorp developed the Protocol, it was obviously inequitable to charge the summer for summer resources (e.g., Gemstate; the terminated Avista Summer Purchase, Morgan Stanley Call and Sempra Call; and the proposed IRP super-peak purchase) and ignore the seasonal nature of the APS Exchange. Not having developed any general mechanism for dealing with seasonal exchanges, PacifiCorp simply shifted the treatment of Cholla from its Hybrid proposal to the Protocol. Going forward, it is inappropriate to treat the combination of the APS Exchange and Cholla as a Seasonal Resource. The APS Exchange requires PacifiCorp to supply power to APS in the summer, losing off-system sales (or purchasing resources) when market prices tend to be high, in exchange for power from APS in the winter, much of which must be sold into a weak Desert Southwest market. The net cost of the APS Exchange will increase when market prices are high.

Cholla is not a good proxy for the summer costs of providing the benefits of the APS Exchange to the winter. The costs of Cholla are essentially constant over the year, will tend to decrease as the capital costs depreciate, and will not vary with market prices. Since Cholla is likely to be less expensive than the summer supplies that provide the APS return, the Protocol approach would almost certainly understate the cost of the APS contract.

A mechanism for allocating the costs of seasonal exchanges, including the APS Exchange, would correct this misallocation. Once the MSP Committee creates and adopts such a mechanism, Cholla would be treated as a System Resource.

Impediments to Future Integrated Resource Planning

Left as is, the Protocol's initial definition of Seasonal Resources could create a whole set of perverse incentives for states, and hence for PacifiCorp, with respect to integrated resource planning. Various states may view with suspicion both contracts that would be treated as seasonal resources and allocated to that state's peak month, and contracts that would disproportionately favor the other seasonal peak, but not be treated as seasonal resources.

For example, a winter-peaking state may:

- Be reluctant to accept the costs of winter-peaking resources, unless those resources are structured to provide some energy in at least six months and avoid the Seasonal Resources designation.
- Resist accepting the costs of summer-peaking resources that operate for more than five months, since those would not be allocated seasonally.

- Urge PacifiCorp to purchase contracts narrowly focused on the summer peak, and broad winter-peak contracts, and even reject IRPs that do not include such contracts.
- Favor summer power sales, the revenues from which would be allocated to all months, but which would require more summer-peaking resources.
- Resist cost-effective winter power sales, since those would require winter purchases to compensate, or change summer resources to annual resources.

As a result, PacifiCorp may reasonably become reluctant to acquire, propose, or even identify potential purchases and sales that would raise any of these concerns, even if those transactions would be cost-effective. The winter-peaking could still argue for such transactions, based on the costs of transactions by other utilities and other sources. So PacifiCorp might draft a sub-optimal IRP, and then have the complaining state reject the IRP and disallow costs anyway.

Lack of Specificity in Definition Language

The MSP Standing Committee will need to resolve other fundamental issues before it can develop a consistent definition of Seasonal Resources. For the purposes of the current Protocol definition of Seasonal Contract, the MSP Standing Committee will need to clarify what constitutes a "Wholesale Contract." More generally, clarification of what constitutes a "resource" is needed to ensure a consistent definition of seasonal resources in the future.

While this may sound like an abstract legalistic issue, the definition of the scope of a contract or resource may have important effects on cost allocation. Any particular contract may provide for multiple products, some delivered to PacifiCorp and others delivered to the counterparty. The current contract may be the result of an original contract, multiple amendments, and the exercise of options by one or both parties. For most purposes, there is no meaningful distinction between the portions of the resulting document. For example, if PacifiCorp is entitled to 150 MW in high-load hours in August under Schedule 2 of a 1995 contract, it does not usually matter whether that entitlement is part of the same "resource" as the 100 MW PacifiCorp can purchase in low-load hours under an

option in Schedule 3, or the 200 MW PacifiCorp can purchase in January under a 1998 amendment to the contract.

Quite reasonably, PacifiCorp uses different definitions of the scope of a transaction or resource, depending on the distinctions that are useful in a particular context.

- In some situations, PacifiCorp treats each exchange as one contract; in others, PacifiCorp lists the receipt and delivery as separate transactions.
- PacifiCorp sometimes lists the BPA Exchange Summer Storage and March Option arrangements as two separate resources, and other times as a single resource. The two arrangements are very different in terms of which party controls the magnitude of the exchange in any particular year, as well as the timing.
- For most purposes, PacifiCorp considers its ownership of Cholla and the APS exchange to be separate resources. For the purposes of the Protocol, PacifiCorp has combined those resources.
- PacifiCorp sells the same amount of capacity to PSCO in both summer and winter, from the same transmission bubble (East Main), and sometimes treats the sale as a single transaction (e.g., "MSP Study 50.3, Divisional Islanding," February 7, 2003), but other times counts the summer and winter as two separate six-month transactions. (e.g., CCS 2.4.3, 2.4.4)

While the combination or separation of resources and transactions does not matter for most purposes, the definition of resources can have substantial effects on cost allocation under the Protocol. Currently, all resources are allocated on annual loads, so the allocation of costs from a transaction or resource to a particular state are the same, regardless of whether it is treated as one resource or a dozen. Under the Protocol, resources may be allocated differently, depending on whether they are separated or combined.

For example, if PacifiCorp procures a supply for the summer (say, June– August) and another for the shoulder months (say, April–May and September– October), those purchases would both be treated as seasonal. But if the two supplies are considered to be part of a single resource, the Protocol definition would not count that resource as seasonal.

As another example, the Replacement Grant County contract arrangement, which will replace the Priest Rapids and Wanapum Mid-Columbia contracts, has several provisions, or contracts. One such provision, which PacifiCorp has called the Grant County Reasonable Portion contract (DPU 5.1, p. 8) appears to give PacifiCorp a choice of (1) receiving a specific portion of the energy output of the Grant County projects, or (2) allowing Grant County to sell the energy and credit PacifiCorp with the market value. If the Reasonable Portion is a separate transaction, it is a sale, and the Protocol would allocate the revenues on the SG allocator. If the Reasonable Portion is not a separate transaction, it would (1) increase the amount of inexpensive energy for which Oregon and Washington would be credited in the Mid-C adjustment, or (2) reduce the cost of the Mid-C contracts for the computation of the adjustment. The MSP Standing Committee will need to determine which of the three allocations (SG allocation as sales, increase in Mid-C energy, or reduction in Mid-C costs) should be used.

As evidenced by these examples, it is very important that the Protocol be refined to clearly describe how the scope of each resource will be determined. Nonetheless, how the Protocol should be amended to clarify the meaning of "resource" in Seasonal Resources is a complicated issue. The ultimate solution must deal with a variety of contract language and contractual histories. Rather than waiting until disputes arise for individual future contracts, complicating PacifiCorp's planning and cost recovery, the MSP Standing Committee should attempt to resolve the issue generically.

In addition, the MSP Standing Committee will need to determine the treatment of some existing and pending resources and transactions, including the Grant County Replacement contracts.

Separation of Off-system Sales from Associated Resources

The current Protocol allocates resources differently than off-system sales, creating a mismatch in the distribution of benefits and costs. First, consider a situation in which PacifiCorp purchases and sells firm power in the same seasonal pattern (e.g., both in the summer). Even if it makes a profit on a system basis, costs

may rise for states peaking in that season and fall for states peaking in the other season. For example, if PacifiCorp buys power from Canada in the summer to match a sale to California, the Canadian purchase would be charged to the summer, but the sales revenues would go to the entire system. Utah's revenue requirement would probably rise, while Oregon's would fall.

Second, suppose that PacifiCorp signs a contract with another utility to sell capacity and energy from West Valley at cost-of-service rates. Under the current version of the Protocol, West Valley is charged on a seasonal basis, but the revenues would be allocated on an annual basis.

Third, PacifiCorp's balancing sales are made possible, in part, by seasonal resources, but the revenues would all be allocated on to the entire system. For example, if the SCCTs operate only in the summer, PacifiCorp would allocate their costs to the summer, but would allocate to the system the balancing revenues made possible by the SCCT operation. Even if 90% of the energy generated by the SCCTs served off-system sales, all the revenues of which are allocated on annual loads, 100% of the costs would be borne in proportion to summer loads.

Although PacifiCorp does not appear to have any existing sales contracts that would meet the Protocol's definition of seasonality for purchases, there are a couple of contracts would be considered seasonal for any reasonable definition.

- Under the UMPA II sale, PacifiCorp expects to deliver about three times as much power in summer months as in the winter (IR 2.4.3).
- Conversely, PacifiCorp projects that it will deliver about three times as much power to Springfield in the winter as in the summer.
- The two PSCO contracts each require deliveries in six months.

The MSP Standing Committee should take the range of existing and possible future sales contracts into account when developing a mechanism to equitably align the allocation of seasonal sales revenues with Seasonal Resource costs. Allocating all revenues from seasonal sales in proportion to loads in the months of those sales would not be appropriate, since some such sales are made possible by generation that is paid for by load in all months. The MSP Standing Committee should consider approaches that would reduce the costs of Seasonal Resources by the revenues from non-firm sales and seasonal firm sales that occur at the same time.

Omission of Seasonal Exchange Contracts

The MSP Standing Committee is charged with reviewing the "criteria to define seasonal Exchange Contracts and methods for allocating the costs of seasonal exchange returns" to close the gap left by the interim Protocol. The current definition of Seasonal Resources ignores the seasonality of exchanges, other than the inclusion of the APS Exchange in the allocation of Cholla costs.

PacifiCorp states that seasonal exchanges should not be considered Seasonal Resources because exchanges have "no costs" and the Protocol is designed to allocate costs, not benefits (CCS 2.7.3, 2.7.4, 2.81). Counter to PacifiCorp's line of reasoning, exchanges do have costs: the costs of the energy and capacity PacifiCorp delivers at one time and place in order to receive energy and capacity at another time and/or place.

Not all exchanges require special treatment under the Protocol. Some exchanges swap power at one location for simultaneous delivery of power at another location. The Protocol does not distinguish resources by location, so these exchanges require no special treatment. Similarly, some exchanges deliver energy in some hours of a day or week, in return for energy in other hours. The Protocol does not distinguish resources by time of delivery within a month, so these daily and weekly exchanges require no special treatment.

In contrast, a seasonal exchange increases PacifiCorp load and resource requirements in the delivery season (when PacifiCorp delivers power to the counterparty), while providing resources in the receipt season. The increased requirements in the delivery season may require that PacifiCorp acquire resources to serve that season, and the increased supply in the receipt season may allow PacifiCorp to avoid acquiring resources to serve that season. For example, the APS eliminates the need for 480 MW of Seasonal Resources that would be charged to the winter and creates the need for 480 MW of Seasonal Resources that would be charged to the summer. Since a seasonal exchange may have substantial effects on allocation of other costs, it is essential that the costs of the seasonal exchange be allocated in a manner similar to the costs of the resources and transactions it replaces.

Currently, exchanges constitute an important part of PacifiCorp's portfolio of seasonal resources. PacifiCorp currently has two exchanges, APS and Tristate, in which it delivers power in the summer and receives a like amount in the winter, and another exchange with Redding, in which PacifiCorp delivers power in the summer and receives smaller amounts year-round. These three exchanges increase PacifiCorp's winter resource position by some 1,110 MW compared to the summer. Thus, in order to provide the same amount of capacity on the summer peak as on the winter peak, all else equal, PacifiCorp would need 1,110 MW of summer seasonal resources.

The BPA Palisades Exchange has a complex monthly pattern of receipts and deliveries, but could be seen as a seasonal exchange with net energy flows to PacifiCorp in the summer and to BPA in the winter.

The MSP Standing Committee probably has at least a couple of viable options to amend the Protocol to fairly allocate the effect of seasonal exchanges. One approach would be to treat each exchange as shifting load from the delivery months to the months in which PacifiCorp returns power. Hence, the APS Exchange could be treated as additional summer peak and energy load, distributed among the states in proportion to their contributions to loads when APS delivers power in the winter. This adjustment of the SG and SE allocators would affect the allocation of all seasonal and system resources.

Another option would be to treat each exchange as a market purchase in the delivery months, and a market sale in the return months. The MSP Standing Committee will need to consider these and other options for equity, simplicity, and effects on integrated planning.

Allocation of Seasonal Resources

The MSP Standing Committee will need to deal with two previously discussed issues dealing with the monthly allocation of Seasonal Resources : (1) including operating reserves, as well as energy production, and (2) the relative weighting of capacity, HLH energy and LLH energy.

In addition, the MSP Standing Committee should carefully consider the Protocol's decision to allocate the costs of Seasonal Purchases on an aggregate basis. The Protocol would compute a jurisdiction's Seasonal System Generation Purchases Factor (SSGPF) from the weighted monthly energy from seasonal purchases in each month and the jurisdiction's monthly loads. That SSGPF would then be applied to the total cost of Seasonal Purchases. The Protocol does not differentiate between costs of summer and winter resources.

If the majority of the energy from Seasonal Purchases were delivered in the summer, but the \$/MWh costs of the winter purchases were much higher, the majority of the costs of Seasonal Purchases could be allocated on summer loads, even if the majority of the costs were incurred for the winter purchases.

Whether the Protocol's approach creates an equity problem depends on whether the parties in the various states are content with the average-cost approach, preferring simplicity to precision. If there is consensus on the approach, the MSP Standing Committee should make it clear that the implications have been explained to the parties, and it has generally been accepted, to minimize the chance of later disruptive disputes. If there is no consensus, the MSP Standing Committee would have the opportunity to work out an acceptable formula before specific disputes arise.

In addition to the equity issues, this facet of the Protocol may create perverse incentives. Summer-peaking states might prefer that winter purchases be aroundthe-clock for as many months as possible (five months, under the current Protocol definition), since those purchases would maximize the shift of Seasonal Purchase costs to the winter, while minimizing the upward pressure on average costs of Seasonal Purchases. Winter-peaking states might prefer that the winter purchases be as narrow in hours and months as possible, to minimize the energy from winter Seasonal Purchases and hence the shift of Seasonal Purchase costs to the winter. The states' preferences for summer purchases would be reversed. PacifiCorp's preferences might be driven by its perceptions of which states were most likely to challenge the recovery of purchases that were not shaped to their advantage.

The MSP Standing Committee should consider all these factors in reviewing the allocation of Seasonal Purchases and other Seasonal Resources.

Cost Allocation to Permanent Direct Access Customers

The Protocol (§X.A.2) lays out only the most general rules for the treatment of loads "permanently choosing Direct Access or permanently opting out of New Resources." All the details remain to be resolved, and are left to the MSP Standing Committee.

Permanence of Opt-out

The Protocol clearly intends that customers who permanently opt out of new resources can never return to cost-of-service generation, but it does not define "customer" for this purpose, or prescribe any rules for determining when a load should be considered part of an earlier opt-out.

If future market prices are lower than cost-of-service rates, the opt-out customers will be content to stay on market rates. But if future market prices become prohibitively high, customers who have opted out will have every incentive to return to cost-of-service rates as new customers. This may be accomplished by transferring the facility to an affiliate. If that is prohibited by the host state, the facility will likely be sold to another firm; the new owner, as a new customer, might be eligible for regulated rates, and would face lower operating costs for the facility. Similarly, each time an opt-out industrial plant added a new process or a commercial complex added a new building, the owner might face the option of connecting either through the existing meter (as opt-out load) or a new meter (as regulated load). These situations raise costs to all the non-Direct-Access states, as the supposedly permanently opt-out load has the choice of taking power from regulated resources, if those are less expensive than market.

Ideally, the MSP Standing Committee will develop rules to ensure that states other than the Direct Access state incur no costs from the return to integrated service of the loads of the current facilities of opt-out customers, regardless of future ownership, and to clarify the geographical or other scope over which new loads of opt-out customers will be included in the opt-out.

Enforcement Mechanism

The Protocol also does not explain how other states would enforce whatever rules are developed for permanent opt-out. If major industrial and commercial customers are under great financial pressure due to an earlier decision to opt out, the host state will have strong incentives to ignore loads that surreptitiously return to regulated rates, increasing costs to customers in other states.

The MSP Standing Committee will need to work out rules for reporting of opt-out load by customer, to allow other states to defend their interests against illicit return of load.

Opt-Out Cohort

The Protocol does not specify how often customers might be allowed to opt out of New Resources. Nor does it specify whether each opt-out cohort would have a different set of Existing Resources, increasing the complexity of the allocation process, or whether the Existing Resources for all opt-out customers would somehow be merged. The MSP Standing Committee must resolve these aspects of the definition of an opt-out cohort.

Definition of New Resources

The Protocol defines New Resources as those "acquired after the election to permanently choose Direct Access or opt out of New Resources" (Section X.A.2) or less helpfully "Resources that are not Existing Resources as established pursuant to Paragraph XA2 of the Protocol" (Appendix A). The Protocol does not deal with important issues of identifying new resources. For example,

- It is not clear whether a repowering, as proposed at Gadsby, is entirely or partially a New Resource.
- The 2003 IRP treats the life extension of Carbon as a new resource, but for ratemaking it would be a capital addition at an existing plant.
- The increased capacity from upgrading an existing unit might be considered a new incremental resource, or part of the Existing Resource.

- Contracts are regularly extended, restructured, or amended; it is not clear how much change would render a contract to be a New Resource.
- PacifiCorp holds options to extend the West Valley contract and to purchase the plant outright; exercising those options could be considered to maintain an Existing Resource or create a New Resource.

The MSP Standing Committee will need to define "New Resources" more specifically, before permanent opt-out can be viable.

Definition of Opt-Out Load

It is not clear whether the Protocol intends that the opt-out customers' load for allocation purposes would be (1) fixed at some effective date, and will not then vary with the customers' actual load or (2) measured as the customers' actual load in each year. The former approach more definitely freezes the eligibility and responsibility of the opt-out loads from the remaining firm load. But the latter interpretation is suggested by the provision that the costs of Existing Resources will be allocated on "Load-Based Dynamic Allocation Factors," which are defined as factors "calculated using States' monthly energy usage and/or States' contribution to monthly system Coincident Peak." The MSP Standing Committee must resolve this confusion.

In addition, if the opt-out customers' load is fixed for allocation purposes, the MSP Standing Committee would also need to determine how that load would be measured: the loads of the last 12 months prior to opt-out, the average of some number of recent years, actual load plus forecast growth through the date of the last Existing Resource, or something else.

Allocating Sales Revenues to Opt-Out Load

The Protocol does not mention how revenues from wholesale sales would be allocated between Existing and New Resources, and hence between opt-out and other loads. All sales could be treated as Existing, or all sales could be treated as New, or sales contracts after some date could be treated as New, or sales revenues could be allocated in proportion to fixed resource allocations, among other approaches. The treatment should be clear before any state commits to allowing opt-out.

Energy Costs and Benefits to Opt-Out Load

The Protocol would allocate a portion of the costs of Existing Resources to the opt-out load. Depending on the treatment of opt-out in the host state, those costs may be borne by the opt-out customers or PacifiCorp. Whoever pays the costs of the opt-out portion of Existing Resources should also receive the benefits of the corresponding energy (including the time pattern and capacity value of the Existing Resources).

Accounting for those benefits, and reconciling the allocation of costs and benefits, need not be particularly contentious, but it must be carefully laid out by the MSP Standing Committee before any state makes unilateral assumptions about allocations in deciding to allow permanent opt-out. Among other things, the parties must clarify what loads will be used in the runs of GRID (or some other production-costing model) to forecast or normalize production costs for jurisdictional ratemaking, and how each component of costs and revenues will be allocated. For example, if the model runs use the sum of full-service load and the fixed opt-out load, including enough non-firm purchases to serve the difference between the opt-out load and the load served by remaining Existing Resources, but the costs of the non-firm purchases are allocated only to the full-service load, the full-service load could be allocated excessive costs.

The MSP Standing Committee should resolve the ambiguities in the allocation of energy costs related to opt-out load. If the dispatch of the Existing Resources change due to changes in market prices, firm wholesale sales, or the availability of other resources, the energy costs allocated to the opt-out load may be significantly larger or smaller than the costs that the opt-out load previously paid for those Existing Resources. This result may be quite reasonable, but it may also be different from the treatment assumed by some parties to the Protocol. It would be useful for the MSP Standing Committee to clarify whether the energy associated with the opt-out load varies only with the remaining capacity of Existing Resources, or whether it also varies with the operation of those Resources.

The MSP Standing Committee must also clarify how, if at all, the costs and revenues of balancing sales and purchases would be allocated to the opt-out load.