

Appendix A

A Broad Critique of the IRP Process, A Suggested Solution and Changes to IRP Standards and Guidelines

On April 30, 2013 PacifiCorp filed its bi-annual Integrated Resource Plan (IRP) with the PSC. Not surprisingly, given the evolution of the process, number of parties involved, and our past experience with the IRP process, it was 30 days past due. Leading up to the filing the Company held numerous meetings, printed and distributed numerous power point and other presentations, and answered formal and informal data requests from the regulatory community and from outside interested parties from several state jurisdictions. In holding these meetings and conference calls, answering data requests from various parties and performing lengthy, resource-consuming calculations in response to others' hypotheticals, the Company has devoted a considerable amount of time and resources to the development of this IRP, as it has in previous IRPs.

The time and resources devoted to the IRP effort are ultimately paid for by ratepayers and are becoming disproportionate to any benefits of the IRP.

For several years the Division has been concerned that PacifiCorp's IRP process may have become too unwieldy. In previous IRP comments, the Division has raised some of its concerns and, for example, has suggested the Commission revisit its IRP Standards and Guidelines.¹ The Division now believes that the entire IRP process needs to be revamped and significantly downsized.

Issues with the IRP process include the following:

- The IRP process lasts too long.
- Often, the Company changes its assumptions relatively late in the process after much time spent and many meetings held.

¹ Docket No. 09-2035-01, Report and Recommendation of the Division of Public Utilities, June 8, 2009, p. 4.

- The amount of data produced in the IRP itself and throughout the process is overly large, cumbersome, and burdensome, both to the Company and to any party trying to analyze it.
- Most of the work performed by the Company, and by extension, the time spent by regulators and other parties, does not add real understanding of what the Company should be doing, or even what it is going to do.
- The IRP may be out of date by the time the Company files it with the Commission.
- The IRP is often significantly out of date by the time the Commission has had the opportunity to receive comments in the IRP and acknowledges, or does not acknowledge, the IRP.
- In sum, there is too much effort for too little pay off. Or, to put it in economic terms: the Division believes that the benefit/cost ratio of the current IRP process is much less than 1.0.

The Division elaborates on these bullet points below. The Division then makes a suggestion for a Model IRP Process. Finally, the Division attaches suggested revised Standards and Guidelines as an annotated redline version of the current Standards and Guidelines approved by the Commission for PacifiCorp's IRP.

The Process is Overly Long and Burdensome

Over the next few months following this filing, members of the regulatory community and interested parties will pore over, and write memoranda about the three-volume, 726-page filing, including a wind integration technical memo, together with all of the meeting presentations and notes, and responses to data requests in order to gain the following insights: that the Company is forecasting slower growth so that it will not need to acquire significant generating capacity for at least 10 years; that the Company will be adding to its transmission network (mostly in the latter part of the next decade); that PacifiCorp will add some presumably cost-effective DSM resources in amounts that the Division believes may be optimistic; and that it will enter into short-term power purchase contracts known as “front office transactions” in order to cover generation capacity shortfalls.

The Company also derived its preferred portfolio based, primarily, on what it considered to be “medium” assumptions. “Medium” assumptions are generally understood to be the Company’s best-guess, middle-of-the-road prediction of future conditions.

In order to arrive at its assessment of future conditions along with its the preferred portfolio for the IRP, the Company spends a massive amount of time preparing and analyzing dozens of future scenarios primarily to show “what ifs” to various parties. Some scenarios are formulated by the Company and some are later proposed by others to address perceived deficiencies in the Company’s chosen dozens of scenarios. All of these scenarios will prove to be in error as actual events unfold over the coming years. These scenarios may have some intellectual interest, but have little practical effect on what the Company actually plans to do and only serve as general guidance and bases for special interests to criticize the Company for not choosing a particular set of assumptions or a particular set of resources in its “preferred portfolio.”

The regulatory community and interested parties are brought into the process too early. Many of the critical assumptions that are made in the IRP are subject to significant change long before the IRP is finalized. The Company should not be expected to hold conferences with stakeholders until the assumptions are getting close to final.

The various portfolio scenarios are all prepared under a 20-year time horizon. However, recent history demonstrates that the outlook for resource needs can change dramatically in just one or two years (or even over a few weeks or months, as cited above). The Company’s Business Plan is a ten-year plan. The System Optimizer and PaR models should be used for no more than a 10-year planning period.² If, for some reason, it is desired to get a sense of what the projections of the 10 years following the end of the 10 year planning period indicate, then the Company could present this extended period at a very high level. For example, it could be as minimal as three line items: projected system load, projected resources, and the estimated timing and size of additional resources. There would be no particular reason to identify the technology of the additional resources in these “out” years, except, perhaps to indicate whether it is anticipated that

² A conceivable, if unlikely exception, might be when the Company knows that it wants to pursue the acquisition of a major resource (say, a 3000 MW nuclear plant) that may take longer than ten years from start to finish. In this instance that Company should probably run its model to the time it believes the acquisition would be completed.

they would meet RPS requirements. It is little more than a fantasy to believe that detail beyond this bare minimum in the “out” ten years has any credibility.

The Division believes that the reduction to a 10-year planning horizon alone would, everything else being equal, significantly reduce the costs to the Company to develop the IRP.

A few months after it is filed, the IRP is often out of date.

By the time the IRP is published (including those occasions when it is filed on-time), commented on, and acknowledged (or not) by the Commission, the IRP is already well on its way to being obsolete: for example, load forecasts have been updated, energy and natural gas prices have changed, environmental and other laws and regulations may have changed, and perhaps new technologies have been more completely vetted since the IRP was in the development process. This fact alone, that the IRP is too quickly out of date, brings into question the reasonableness to all parties of the time and effort put into the creation of the IRP by the Company and by the regulatory community and other interested parties.

In general rate cases and in CPCN and other dockets, the Company may justify an acquisition, in part, because “it is in the IRP.” But if what the Company wants to acquire is not in the IRP, or if the activity the Company wants to acquire is actually contrary to the IRP, the Company then reasons that “things have changed” since the IRP was compiled. A telling and recent example is the PacifiCorp 2016 All-Resource RFP. The Company canceled the RFP five months after its 2011 IRP Update clearly “demonstrated” the need for a new 600 MW resource by summer 2016. The Company justified the cancellation of the RFP, which occurred just about the time it was to issue its final “short list,” because the Company’s load forecast indicated that the resource was no longer needed. If the 2011 IRP Update had been the regular bi-annual IRP, then the Company likely acted on new information before the time the Commission would have received comments and issued an acknowledgement order on the IRP. In other words, before the Commission would have acknowledged the IRP, the Company had already determined that its IRP Update was, for all practical purposes, obsolete just five months after its issuance.

None of this is to disparage the Company. Instead, it highlights that the IRP can be casually cited for support or easily repudiated based on changed conditions because of its staleness. In other words, the IRP puts on the record data and corresponding plans that may no longer reflect reality. Given that acquisitions and actions of the sort proposed in an IRP are much more thoroughly reviewed before regulators authorize recovery, the casual citation and easy repudiation of the IRP suggest it is of little utility or authority with regard to specific actions or resources.

Balance the effort with the payoff

If the Division's suggestions are adopted such that the Company is expected to run significantly fewer scenarios and then for only a 10-year planning horizon, the need to bring in stakeholders early would be mitigated since the Company would be less constrained by modeling turnaround times. The Company could hold one or two meetings (held close together) to discuss the major assumptions and answer questions.³

The multiplying of scenarios serves little purpose. There may be a use for a minimum number of alternatives, such as a non-RPS scenario to get an understanding of the effects the various state RPS requirements have on the Company; a zero-carbon tax scenario would probably be useful to gauge how the carbon-tax assumptions affect the resource selection. There may be a handful of other scenarios that might be worth having the Company run. However, the Division believes that in the end the Company is going to select medium-assumption scenarios to derive its preferred portfolio. The Company would be heavily criticized to do otherwise, since the generally expectation is that, at any given point in time, a medium scenario is, or most closely resembles the best-guess, middle-of-the-road forecast. Running 94 portfolios, as was done in the 2013 IRP, (nearly five times the number of core case portfolios developed for the 2011 IRP), wastes the time and resources of everyone involved, not to mention ratepayer money.⁴

³ It would be preferable for the Company to issue its assumptions a few days in advance of the meeting(s) to regulators and interested parties.

⁴ Some time ago, the Division argued to see dozens of different scenarios to be assured that the Company was adequately "covering the waterfront" and perhaps to perform some sort of meta-statistical validation analysis. However, the Division is now convinced that this is misguided and wasteful. That is, such "waterfront" coverage, while perhaps intellectually interesting, does not really convey useful information that the Company would include in any Action Plan.

There is some use to including as part of the IRP process some special areas of focus, such as renewable resource integration cost studies and perhaps some broad DSM studies. But these could equally well be reviewed as independent topics (as DSM is). The Company would be expected to be sensitive to the “real world” so that its “medium assumption-based” preferred portfolio will also include “best guess” expectations of new legislation and changes in technology.

The major area not discussed so far is transmission. The Commission might consider running a parallel transmission track to energy resource acquisition. In the current IRP, the Company provided several different transmission scenarios that it ran on top of its resource scenarios. In order to keep things relatively simple, the Division would expect that the preferred portfolio would include a preferred transmission scenario. To provide a sense of a “range” around the transmission selection, the Company could run a couple of “extreme” scenarios around the preferred portfolio: e.g. one in which there was little or no additional transmission acquired (unless that was the preferred transmission scenario), and one with significantly more transmission. An alternative would be for the Company to argue, if it could, that the preferred transmission scenario was self evidently the correct one. In addition, the transmission SBT Tool could be considered outside the IRP process.

The Division’s request for Commission actions

The Commission should make it clear that the IRP is the Company’s IRP and what it does in developing the IRP is at the Company’s discretion. The Commission may or may not acknowledge the IRP, but it should be clear that the Company is not expected to do anything not explicitly ordered by the Commission.

The Commission should set the goal that the IRP should be relatively simple and easily understood. Given that the principal inputs to the IRP can and have changed significantly over short time periods demonstrates that the multiplication of detail in the IRP is misleading and only gives the aura of accuracy and precision, without the substance.

The Commission should revisit the fundamental purpose and use of the IRP. Once it has defined the “mission statement” of the IRP, it should craft any additional guidelines for the IRP around that mission statement. As intimated above, the “mission” of the IRP can likely be implemented through a simpler, clearer process than the current process and report which has become a near-meaningless kluge.⁵

The Division, below, makes its suggestion for a much simplified IRP process that provides that information that should be actionable both by the Company and by regulators. The Division also sets forth a proposal for the purpose, or “mission” of the IRP in the Redlined Standards and Guidelines provided below.

A MODEL IRP PROCESS:

PacifiCorp annually goes through a process, parallel to the IRP Process, to develop its 10-year Business Plan. While the Company considers the Business Plan in its entirety to be “highly confidential,” certain parts of the Business Plan pertain to resource and transmission planning. In its 2011 IRP Update, the Company included its Business Plan portfolio as its IRP Update portfolio. In the past, at least, the Division understands that the Business Plan was formally approved by the PacifiCorp and MEHC Boards of Directors. Currently, the Division understands that only PacifiCorp’s CEO approves the Business Plan. The Company could fulfill its IRP filing requirement by doing the following:

⁵ kludge or **kluge** ☒ (*n. Slang*) **1.** A system, especially a computer system, that is constituted of poorly matched elements or of elements originally intended for other applications.
2. A clumsy or inelegant solution to a problem. <http://www.thefreedictionary.com/kluge> accessed June 27, 2013.

1. Around approximately September 1⁶ of each year, the Company would issue to regulators and interested parties a preliminary statement of assumptions that it was employing in its IRP development. Shortly after the issuance of this assumptions statement the Company would hold one or two meetings with regulators and interested parties to discuss the assumptions. Parties could submit in writing their comments, criticisms and recommendations regarding its IRP assumptions within two weeks of the final meeting.

2. Around approximately December 1 of each year, the Company would participate in a technical conference in which the Company would review and discuss with regulators and other interested parties the principle inputs and assumptions and that had gone into the relevant resource acquisition portions of the Company's annual Business Plan along with the preferred portfolio the Company had selected.⁷ At this technical conference, among other things, the Company would discuss why it did, or did not accept particular public inputs to its IRP process.

3. On January 31 of each year the Company would file the relevant portions of its Business Plan with the Commission, including detail of the inputs and assumptions made in developing its preferred portfolio and Action Plan. In addition to the preferred portfolio the Company would include and explain a handful of alternative portfolios developed under specified circumstances, such as portfolios unconstrained by carbon taxes and RPS standards. The Company might also include as many as a half dozen alternative portfolios showing the effects of relatively extreme assumptions, such as, for example, very high carbon taxes, very high, and very low energy prices, very high load growth, and load decline; perhaps one or two other scenarios.

⁶ The dates in this Model IRP Process are only illustrative of a possible timing of events.

⁷ The 2011 IRP Update filing is a template of the Division's expectations of the type of information from the Business Plan that the Company would be making public. If the Company wanted some parts to remain confidential, then the usual confidentiality agreements could be procured.

4. Between January 31 and March 31, one or two technical conferences would be held for the Company to explain its IRP assumptions and results. Intervenors could submit data requests through March 31 with a 14 day turnaround time. The Company, at its discretion, could decline to run requests for additional portfolio scenarios unless specifically ordered by the Commission to do so. (If a party could make a case for a general need for a particular type of scenario, say for example, one that forced the selection of 100 MW of solar resources each year of the 10-year forecast, the party could petition the Commission to order the Company to provide such a scenario in subsequent years. The Company and other parties would be afforded a brief opportunity to comment on any such request, followed quickly by Commission action. The Commission should adopt a policy of keeping the IRP as simple, transparent, and meaningful as possible).

5. Parties would file comments to the Commission by April 30, and the Commission would endeavor to acknowledge (or not) the IRP by May 31 along with any comments or directions for future IRPs as the Commission saw fit.

Pros: First and foremost the Business Plan and the IRP would be very closely aligned, if not one and the same. The write-up could be similar to what the Company now files as its IRP Update. We could be reasonably sure the Action Plan was something that Company management was actually committed to—at least at the time it was prepared. It would therefore convey meaningful information about Company plans in a relatively timely manner. The filing would be relatively brief, understandable, and could be commented on in a short time frame. Regulators and interested parties will still have the opportunity to read the IRP, have meetings, and write memoranda.

Cons: The IRP will lack the detail that some may want. Various parties will likely complain that the Company did not adequately investigate something of particular interest to that party. A regulatory process with meetings, comments, and procedural matters will still be required, if abbreviated.