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BEFORE THE PUBLIC SERVICE
COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Approval of its Proposed Energy Cost Adjustment Mechanism	Docket No. 09-035-15

PREFILED DIRECT TESTIMONY OF NANCY L KELLY

Phase II, Stage 1

ON BEHALF OF

WESTERN RESOURCE ADVOCATES

AND

UTAH CLEAN ENERGY

June 16, 2010

I. INTRODUCTION

Q: Please state your name, employer and present position.

A: My name is Nancy L Kelly. I am employed by Western Resource Advocates (WRA) in its Energy Program as a Senior Policy Advisor.

Q: Have you previously filed testimony in this docket?

A: Yes. I filed direct testimony on November 16, 2009 and Surrebuttal Testimony on January 5, 2010 in Phase I of this docket.

Q: On whose behalf are you submitting testimony?

A: WRA and Utah Clean Energy (UCE).

Q: What is the purpose of your testimony?

A: In its testimony in the first phase of this docket, the Office of Consumer Services opposed an ECAM as not in the public interest, but recommended that if the Commission were to approve a second phase to examine ECAM design, issues of market reliance and natural gas fuel costs must first be addressed. In its Order issued February 8, 2010, the Commission initiated a second phase and expressed interest in developing a further record in the areas of market reliance and natural gas hedging. A schedule was determined that addresses these issues separate from other ECAM design issues.

The purpose of my current testimony is to address issues related to market reliance and natural gas resources in the larger context of integrated resource planning and to offer the

Commission a mechanism to put teeth into its IRP orders and to mitigate the biased incentives/disincentives of an ECAM on long-run planning.

Q: Please summarize your recommendation.

A: In conjunction with Commission approval of any ECAM design, I recommend the Commission require the Company to meet energy efficiency and renewable resource targets and limit the Company's use of the short-term wholesale power market for capacity purposes.[1] Such targets and limits would be set consistent with the portfolio that best manages risk and uncertainty as determined through the integrated resource planning process using the Commission's three-step approach. This approach is consistent with the guidance provided to the Company in Docket Nos. 07-2035-01, 07-035-94, and 09-2035-01.

II. SUBOPTIMALITY OF INTEGRATED RESOURCE PLANNING

Q: Do you agree with the Office of Consumer Services that market reliance and natural gas hedging are threshold issue that must be addressed prior to the implementation of any ECAM design?

A: Yes, but more fundamentally, integrated resource planning must be addressed and a mechanism put into place to assure that customers benefit from least-cost, least-risk planning prior to assuming the full cost responsibility of PacifiCorp's long-run planning decisions.

[1] Any ECAM design must include a meaningful sharing of risk. We will address this aspect of an ECAM in the next step of Phase II.

As I understand it, the Office's reasons for singling out the market and natural gas fuel cost components of NPC is because these two cost components are particularly risky as identified in PacifiCorp's integrated resource planning processes, and the Company's resource plans have included more market and natural gas resources than planning studies indicate is optimal. If an ECAM is implemented, the actual net power costs of risky resources will be immediately assigned to customers instead of being paid by the Company and its shareholders between rate cases as is currently done.

This Commission is aware of current concerns with the Company's chosen resource acquisition plan. In its April 1, 2010 order acknowledging the 2008 IRP, the Commission stated: "we are not convinced the Preferred Portfolio is the optimal portfolio," and the Commission made clear "acknowledgement does not guarantee favorable ratemaking treatment of future resource acquisition decisions."[2]

Further, the Commission did not acknowledge the previous resource plan, IRP 2006. It concluded:

> [T]his IRP has not adequately adhered to our guidelines requiring consideration of all resources on a consistent and comparable basis, a link to the strategic business plan to ensure customer benefits of IRP, the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty, and different resource acquisition paths for different economic circumstances with a decision mechanism to select among and modify these paths as the future unfolds.[3]

However, the Commission may be less aware that these concerns are not new but date to the Commission's early involvement in PacifiCorp's integrated resource planning.

[2] Public Service Commission, Report and Order, *In the Matter of the Acknowledgement of PacifiCorp's Integrated Resource Plan*, Docket No. 09-2035-01, April 1, 2010, p. 58.

[3] Public Service Commission, Report and Order, *In the Matter of the PacifiCorp 2006 Integrated Resource Plan*, Docket No. 07-2035-01, February 6, 2008, pp. 43-44.

Comments filed by the Office of Consumer Services (then Committee of Consumer Services) December 21, 2001 in Docket No. 98-2035-05 are instructive. I have chosen to quote at length because the comments demonstrate that the pattern that has concerned regulators in the last two IRP cycles is long-standing and unlikely to be resolved in the IRP context.

> Of the directives included in the Commission Orders and listed above, PacifiCorp complied fully with but one. … The directives with which PacifiCorp did not comply as well as certain violations of the IRP Standards and Guidelines are discussed below.
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> 3.1.1 Consistency Between the IRP Action Plan and the Company's Strategic Business Plan
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> The directive that the Company's internal business plan be consistent with the IRP comes from both the IRP Standards and Guidelines and the RAMPP-5 Order. The Standards and Guidelines state: "The Company's Strategic Business Plan must be directly related to its Integrated Resource Plan."[4] The Commission reiterated this directive in the RAMPP-5 Order stating that RAMPP-6 "must include a section that demonstrates the consistency of the two plans."[5] The intent of the Orders is to assure that PacifiCorp not only plans to meet the resource needs of its customers in a least-cost manner but that it implements the plan.
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> The Committee believes that PacifiCorp has intentionally violated the intent of the Commission orders regarding consistency. Although the Committee recognizes the relation of the action plan to the Company's strategic business plan, the connection appears opposite regulatory intent. The Company appears to have been positioning for a deregulated environment in which it would not have to plan for regulated load for at least the past two RAMPP cycles.[6] PacifiCorp's internal business plan appears to have been to avoid acquiring additional regulated resources.[7]
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> This assessment is supported by PacifiCorp's lobbying activity at the Utah Legislature in the 1997-1998 time period; by the assumptions, modeling and action plans of RAMPP-5 and RAMPP-6; by the Company's decision to cut

[4] Public Service Commission, *Report and Order on Standards and Guidelines*, Docket No. 90-2035-01, p. 41.

[5] Public Service Commission, *Report and Order on Acknowledgement of PacifiCorp's Integrated Resource Plan*, RAMPP-5, p 10.

[6] Stranded cost recovery was the Company's expressed reason for its reluctance to acquire new resources during the RAMPP-5 cycle. Cost recovery resulting from differences in multijurisdictional allocations is the Company's current expressed reason for its reluctance to build.

[7] During this timeframe PacifiCorp's deregulated arm was involved in two generation projects. The Klamath Cogeneration Project is a gas-fired 484 MW facility that began commercial operation in July of 2001. The Stateline Wind Project will produce 265 MW and will begin commercial operation sometime in late 2001.

personnel dedicated to integrated resource planning at the beginning of the RAMPP-6 cycle;[8] and most recently by PacifiCorp's Strategic Regulatory Project (SRP) filing which would effectively deregulate generation and do away with integrated resource planning permanently.

The effect of PacifiCorp's separation of the wholesale market for planning purposes,[9] load growth assumptions, and asymmetrical risk analysis in both RAMPPs 5 and 6 have the effect of appearing to defer the need to acquire new resources. However, the delay is on paper only, and Utah customers are now paying for PacifiCorp's faulty business strategy.[10]

3.1.2 Wholesale Sales Consideration

The IRP Standards and Guidelines state "the Company will include in its forecasts all on-system loads and those off-system loads which they have a contractual obligation to fulfill."[11] By separating wholesale activities from retail loads, RAMPPs 5 and 6 appear to sidestep the safeguard implicit in the requirement and violate its intent.

Beginning with RAMPP-5, PacifiCorp began separating wholesale loads from retail loads. PacifiCorp's generating resources were matched to retail loads. Long-term wholesale sales obligations were matched with long-term wholesale purchases, and the shortfall was purchased in the short-term market. PacifiCorp's expressed purpose in changing its wholesale market modeling was to assure that retail load growth, not existing sales contracts, triggered the acquisition decision. This treatment defers the siting of new resources by the model.

In partial response to the RAMPP-5 Order, which directs the Company to recommend a method of accounting for ratepayer benefits while mitigating wholesale market risk, and because of the Regulatory Advisory Group's concern regarding the risk of relying on the short-term market to meet long-term sales obligations, PacifiCorp modified its modeling for RAMPP-6. Generating resources remain matched to retail load, and long-term wholesale sales obligations remain matched with long-term purchases. However, generating resources in excess of retail load are used to meet long-term sales until a 10% reserve margin is reached. The model then goes to the short-term market to purchase the rest. This modeling still defers the need to acquire new resources but by less than previously.

The Committee does not believe that this change constitutes compliance with the Commission Order. This treatment does not mitigate the risk associated with short-term market purchases; it simply reduces the total purchased. Mitigating

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[8] Two staff members were assigned to the RAMPP-6 cycle, down considerably from past years. These staffers had a number of other responsibilities as well. See PacifiCorp, *PacifiCorp RAMPP-6 Advisory Group Meeting Minutes*, Friday, 19 February, 1999, p.1.

[9] The Company did not make the same separation when seeking cost recovery!

[10] Public Service Commission, *Report and Order*, In the Matter of the Application of PacifiCorp for an Increase in its Rates and Charges, Docket No. 01-035-01, 10 September, 2001, pp. 26-37.

[11] Public Service Commission, *Report and Order on Standards and Guidelines*, p. 42.

risk requires a hedge. Long-term contracts or physical plant would have hedged the risk. The Company simply gambled that the short-term market would remain a "two-cent" market indefinitely as it testified in the hearings regarding the sale of Centralia.[12] Furthermore, the Company did not study the effect on reliability as directed, and although reliability was maintained last year when the WSCC spun into crisis, the cost was exorbitant.

The IRP Standards and Guidelines require that the IRP include "an analysis of the off-system sales market to assess the impacts such market will have on risks associated with different acquisition strategies."[13] The Company did not undertake an adequate analysis. Instead, it made the competitive long-run assumption about a manipulable short-term market that prices would be capped by the cost of coal resources. Competitive long-run assumptions obscure the risk inherent in short-term phenomena, and although the possibility of market power being exercised was raised in the Regulatory Advisory Group, the Company dismissed it.

The combination of violating the intent of the market separation directive with the absence of an examination of its risk, or clarity concerning who would bear the risk, has been a recipe for disaster. Reliance on short-term purchases has proven not only risky but also costly. Owning adequate resources in the form of physical plant or long-term contracts is the best hedge against market risk. The Committee recommends that the Commission assure that the Company bears the risk of relying on the short-term market to meet long-term obligations if it continues such practices.

3.1.3 Risk Analysis

The IRP Standards and Guidelines order risk analysis. They state that the Company should include: "an evaluation of the financial, competitive, reliability and operational risks associated with various resource options and how the action plan addresses these risks in the context of both the Business Plan and the 20-year Integrated Resource Plan. The Company will identify who should bear such risk, the ratepayer or the stockholder."[14, 15]

[12] PacifiCorp, *Prefiled Rebuttal Testimony of Rodger Weaver*, In the Matter of the Application for an Order Approving the Sale of its Interest in (1) the Centralia Steam Electric Generating Plant, (2) the Ratebased Portion of the Centralia Coal Mine, and (3) Related Facilities; for a Determination of the Amount of and the Proper Ratemaking Treatment of the Gain Associated with the Sale; and for an EWG Determination, Docket No. 99-2035-03, 15 January 2000, p. 3.

[13] Public Service Commission, *Report and Order on Standards and Guidelines*, p. 42.

[14] Ibid., p. 44.

[15] Although the Company claimed it would accept the risk of its strategy to rely on the short-term market in the IRP process, when the risks turned into actual costs, it asked customers to bear the burden. (RAMPP-5 minutes cf. rate case.)

The Company has repeatedly fallen short of this directive. The Commission did not acknowledge RAMPP-3 for, among other reasons, "the lack of explicit risk analysis," and it ordered improvements to be incorporated in RAMPP-4.[16]

Although the Commission acknowledged RAMPP-4, it was not satisfied with the risk analysis and ordered improvements to be incorporated in RAMPP-5. In its Order acknowledging RAMPP-4, the Commission says: "The Commission finds that RAMPP-4 has incorporated the improvements required by our March 7, 1995 Order, with the exception of an adequate risk analysis…"[17] It further finds: "the IRP should include comprehensive risk analysis, identifying the elements of risk the Company faces, an appraisal of the interrelationships between those risk elements and some attempt to quantify the risks associated with different strategies that the Company is investigating."[18] It orders: "The Company will conduct a comprehensive risk analysis of its potential strategies and will recommend measures to insulate ratepayers from undue risks."[19]

The Commission did not acknowledge RAMPP-5, in part because of the lack of risk analysis, and again ordered improvements to be incorporated in RAMPP-6. In its RAMPP-5 Order the Commission states: "We find that a quantitative risk analysis must be performed in RAMPP-6 if that IRP is to qualify for Commission acknowledgement."[20]

The risk of short-term wholesale market exposure was the most significant risk identified by Utah Regulatory Advisory Group members in the RAMPP-6 process.[21] A Division of Public Utilities (Division) representative had previously made the point in the RAMPP-5 process. Ken Powell stated that if a majority of the utilities in the west pursued PacifiCorp's strategy of relying on the wholesale market to meet total load obligations, rather than building, the surplus could disappear rapidly. Short-term prices could skyrocket.[22]

The Company responded to the directive to include a quantitative risk analysis in RAMPP-6 by providing a case weighted by scenarios of interest to it. The Company assigned the following weights: gas price scenarios 45%; load loss due to deregulation 45%, environmental adders 10%; special interest scenarios 0%.[23]

[16] Utah Public Service Commission, *Report and Order on Acknowledgement of PacifiCorp's Integrated Resource Plan, RAMPP-4,* In the Matter of the Acknowledgement of PacifiCorp's Integrated Resource Plan, Docket No. 96-2035-01, p.8.

[17] Ibid., p. 19.

[18] Ibid., p. 20.

[19] Ibid., p. 22.

[20] Public Service Commission, *Report and Order on Acknowledgement of PacifiCorp's Integrated Resource Plan*, RAMPP-5, p. 10.

[21] This risk was identified in both RAMPPs 5 and 6. The risk became reality during the RAMPP-6 cycle. Regulatory Advisory Group members were very concerned to have this shortcoming addressed.

[22] RAMPP-5 minutes.

[23] Special interest cases refer to scenarios requested by Regulatory Advisory Group members. For example, Utah representatives were not satisfied with the load growth forecasts and requested an additional run using historical

> This response clearly does not meet the Commission's objective or any of its orders regarding risk. It includes limited scenarios of concern to the Company, the risk of higher gas prices and load loss. It does not address the risk of load growth that is higher than modeled. It does not address the risk imposed by the Company's reliance on the short-term wholesale market; in fact, it exacerbates that risk by deferring the perceived need to build through the load loss assumption. It placed no weight on any of the special interest scenarios. Finally no actual risk analysis was undertaken.[24]
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> All four Utah representatives made similar comments and expressed similar concerns with varying levels of outrage at the 9 March 2001 Regulatory Advisory Group meeting evaluating the draft report. No change was made for the final report.
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> The Committee believes the Company's pattern of disregard of Commission orders is intolerable. When the Company repeatedly disregards orders that could protect it and its customers, it must bear the full cost consequence.[25]

Q: How would you characterize PacifiCorp's corporate strategy for dealing with uncertainty?

A: PacifiCorp prefers to avoid resource acquisition during times of uncertainty. Instead, it appears to prefer short-term market transactions and the addition of gas plants that require smaller capital outlays than other resource choices.

Q: How is this harmful?

A: In a low-cost, stable environment, it is not harmful. The problem for the public is that this approach is risky, the risks are asymmetrical, and the risks increase with the level of

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data. In like manner, the Commission had directed that a critical water scenario be run. These are referred to as special interest cases or special interest scenarios.

[24] The Committee discusses what is required for a risk analysis in its discussion of the action plan in section 3.2.2.

[25] Committee of Consumer Services, *Comments on PacifiCorp's Integrated Resource Plan, RAMPP-6*, Docket No. 98-2035-05, December 21, 2001. Pages 3-7. These comments were excerpted from a larger section entitled "Failures to Comply with Commission Orders." Issues relating to load forecasts and lack of a decision mechanism to address changes in economic circumstances were also addressed.

uncertainty.[26]

Q: Please explain what you mean by asymmetrical risk.

A: As we have seen in the past, prices in electricity and natural gas markets can skyrocket to extraordinary levels, but they can only fall so far. Thus, the risks are asymmetrical. As allowance markets develop, they most likely will also be subject to asymmetrical risk.

Q: How would you describe the current planning environment?

A: Uncertain. Federal regulation of carbon dioxide emissions is expected, but how it will impact costs and risks in the electric sector is at this time unknown.

Q: How is the Company responding to the current uncertainty in the planning environment?

A: Its corporate strategy, as expressed in the 2008 IRP Update ("Update"), appears unchanged from what I described above. PacifiCorp's corporate strategy is to avoid acquisition of long-term resources in favor of the acquisition of short-term market purchases and gas additions even though the resources they are avoiding mitigate the market and gas price risks and the emissions risks facing the industry.

In order to protect its shareholders from the risks of this strategy, the Company desires to shift the full cost to customers through an ECAM.

Q: How does the risk of the 2010 Business Plan compare with the risk of the 2008 IRP Preferred Portfolio?

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[26] Risk is defined as having a known stochastic process. Uncertainty refers to fundamental changes in the planning environment.

A: As I detail in WRA's comments on the Update, attached as NLK-1, I conclude that the 2010 Business Plan portfolio contained in the Update is more risky than the Preferred Portfolio.[27] UCE's comments are attached as NLK-2.

Q: What do you conclude from your IRP examination?

A: I conclude that integrated resource planning is not resulting in an "optimal set of resources given the expected combination of costs, risk, and uncertainty." PacifiCorp's resource selections contribute to excessive and volatile net power costs. Utah customers should not bear the net power cost or net power cost risk of resources that are not supported through integrated resource planning.

III. INCENTIVES AND DISINCENTIVES OF AN ECAM ON LONG RUN RESOURCE PLANNING

Q: What other concerns for long-run planning are associated with the implementation of an ECAM?

A: As I explained at length in my direct and surrebuttal testimony already in evidence in this docket, an ECAM introduces planning biases. The following is taken from my November 16, Direct Testimony, pages 3-4.

> A major driver in management's decision-making is its perception of ease of cost recovery. Management is incented to acquire resources for which it believes it will receive full cost recovery and incented to avoid acquiring resources whose cost recovery is less certain. An ECAM would remove a management disincentive to acquire resources with volatile variable costs such as short-term whole-sale market purchases, natural gas fired resources, and even new coal resources. It would also incent management to prefer resources with a lower ratio of capital costs to operating costs since the operating costs would be recovered through the mechanism

[27] I addressed the suboptimality of the Preferred Portfolio in my Surrebuttal testimony on pages 9-10 and Exhibit NLK-1.

> while the capital cost component would continue to be recovered through a rate case whose outcomes are perceived as less certain.
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> These disincentives/incentives would disadvantage resources with low to zero fuel costs such as renewable energy and would reduce the attractiveness of energy efficiency programs, which also have no fuel risk, as compared to fossil-fueled supply side resources. Energy efficiency and renewable energy are best suited to address the major risks facing customers in the current planning environment, volatile natural gas and wholesale market prices, and the uncertain cost of compliance with impending carbon regulation.
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> By furthering an incentive for the utility to favor resources with lower capital costs but higher and more volatile fuel costs over resources that can best manage the multiple risks facing the industry today, the long-run cost of power will likely exceed, potentially significantly, the costs of portfolios that include higher levels of energy efficiency and renewables and thereby better manage risk and uncertainty.

Q: What do you conclude regarding the effect of an ECAM on long-run planning and resource acquisition?

A: I conclude that an ECAM will further exacerbate the Company's current approach to addressing uncertainty. If the Commission concludes shareholder concerns warrant an ECAM, then customers must be protected from excessive and volatile net power costs of biased long-run planning decisions through an appropriate mitigation mechanism.

IV. MITIGATION MECHANISM

Q: Please describe your recommended mitigation mechanism.

A: In conjunction with Commission approval of any ECAM design, I recommend the Commission require the Company to meet energy efficiency and renewable resource targets and limit the Company's use of the short-term wholesale power market to meet capacity requirements.[28] Such targets and limits would be consistent with the portfolio that best manages risk and uncertainty as determined through the integrated resource planning process using the Commission's suggested three-step approach.[29]

Specifically, these targets and limits would be determined consistent with the portfolio that performs best in Step 3. The identified energy efficiency levels and renewable resources would be included in the three-year action plan and solicitation processes resulting from the biennial IRP.

Since short-term market purchases are the residual between projected need and actual need, including resource acquisition, the Company would maintain active records on its market transactions and report these activities to the Commission as part of any ECAM true-up.

This approach is consistent with the guidance provided to the Company in Docket Nos. 07-2035-01, 07-035-94, and 09-2035-01.[30]

V. CONCLUSION

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[28] Any ECAM design must include a meaningful sharing of risk. We will address this aspect of an ECAM in the next step of Phase II.

[29] The Commission's three-step approach for assessing risk and uncertainty is as follows: "1) Identify the optimal portfolios for a relatively broad, and consistently applied, set of fixed input assumptions; 2) subject the unique sets of these portfolios to stochastic risk analysis and identify superior portfolios with respect to the tradeoff between expected cost and risk exposure; 3) examine the cost consequences of the superior portfolios with respect to uncertainty by subjecting the to evaluation under the initial set of relatively broad fixed input assumptions." Public Service Commission of Utah, *Report and Order, In the Matter of the Acknowledgement of PacifiCorp's Integrated Resource Plan*, Docket No. 09-2035-01, April 1, 2010, p. 19. (The same information is found on page 40 of the order issued February 6, 2008 in Docket No. 07-2035-01.)

[30] *Ibid* and Public Service Commission of Utah, *Order on Economic Modeling Issues*, In the Matter of the Application of PacifiCorp, by and through its Rocky Mountain Power Division for the Approval of a Solicitation Process for a Flexible Resource for the 2012-2017 Time Period, and for the Approval of a Significant Energy Resource Decision, Docket No. 07-035-94, February 24, 2010, p. 8.

Q: What is your overall conclusion?

A: I conclude that market reliance and natural gas issues are fundamentally integrated resource planning issues. I further conclude that integrated resource planning has not resulted in the set of resources that best manages risk and uncertainty. PacifiCorp's planning has resulted in excessive and volatile net power costs. An ECAM will shift the full cost of PacifiCorp's past planning decisions to customers. In addition, implementation of an ECAM introduces incentives that further bias resource planning toward risky resources with excessive and volatile net power cost and away from the resources that are best suited to protect customers and shareholders alike from the greatest risks facing the industry today: market and gas price risk and the potential cost of complying with federal regulation of carbon dioxide emissions. Without an appropriate mitigation mechanism in place, long-run planning will continue to be suboptimal, environmentally inferior resources will be selected, and customers will unfairly bear the risk and pay the cost.

WRA and UCE recommend the Commission require the Company to meet energy efficiency and renewable resource targets and limit the Company's use of the short-term wholesale power market to meet capacity requirements.[31] The targets and limits would be determined consistent with the portfolio that best manages risk and uncertainty as determined through the integrated resource planning process using the Commission's suggested three-step approach.

[31] Any ECAM design must include a meaningful sharing of risk. We will address this aspect of an ECAM in the next step of Phase II.